GROUP TEST
six affordable moving coil cartridges

WORLD DESIGNS KEL84 amplifier

NSPIRE THORENS TD160 JUPGRADE turntable

MARTIN LOGAN MONTIS loudspeakers

EXCLUSIVE!

WIN A TELLURIDUM PHONO PRE AMP WORTH £1,380!
(UK ONLY)

7 PAGES OF LETTERS - THE BEST WINS A PAIR OF KEF Q100 LOUDSPEAKERS! (UK ONLY)
stretch your inner sound, anywhere.

ADL CRUISE: a pocket-size amp with attitude:

sound foundations
www.soundfoundations.co.uk
+44(0)1276-501-392
info@soundfoundations.co.uk

FURUTECH
Tokyo • Japan
info@soundfoundations.co.uk

ALPHA DESIGN LABS by FURUTECH
World Radio History
No one produces new loudspeakers faster than Martin Logan it would seem, so we have yet another new model in this issue, the amazing £9500 Montis on p12. We never miss a Martin Logan, because these hybrid electrostatics are all but unique and have their own astonishing sound. I hope you enjoy reading about them. Dare I admit their Theos has just arrived at our offices for review soon!

A Media Player plays music from SD card or USB memory. There aren’t so many around right now but we have just been sent a fascinating example from China, due for review in the next issue. See it pictured in this issue on p44, heading up a feature on the new breed. You’ll see another Chinese manufacturer claiming Media Players are the natural replacement for CD – an interesting idea indeed. Read about it all in Hi-Fi World this month.

You thought a Mac Mini was a dinky little computer? Not when audiophiles get their hands on it. U.K. importer and distributor Item Audio now offer an AP Edition tuned up to deliver high fidelity and you can read about it on p26.

Vinylitas need not worry about all this digital activity though. A good Moving Coil cartridge playing LP puts most digital to shame! We review six affordable MCs in this issue just to underline how good analogue can be – see p17. OK, they cost as much as a Mac Mini and more than a PC (!) but well – that’s about right value-wise isn’t it?

As Adam Smith notes in his column this month we have plenty of Shows to keep us busy at the start of 2012 and two are featured in this issue, Bristol Sound & Vision (p71) and the Wigwam forum show (p117). They reveal the commercial and the enthusiast sides of audio respectively – and how different they can be! Both were fascinating I think you’ll agree when you see what was on display in our Show Reports.

This is another great issue full of interesting entrants into the wonderful world of high fidelity that I hope you will enjoy.

Noel Keywood, editor

**testing (see www.hi-fiworld.co.uk for full explanations of all our tests)**

To ensure the upmost accuracy in our product reviews, Hi-Fi World has extremely comprehensive in-house test facilities, and our test equipment - from big names like Rohde & Schwarz and Hewlett Packard - is amongst the most advanced in the world.

Loudspeakers are measured using a calibrated Bruel & Kjaer microphone feeding a Clio-based computer analyser, using pulsed and gated sinewaves, in a large room to eliminate the room’s influence. Pickup arm vibration is measured with a Bruel & Kjaer accelerometer.

No other UK hi-fi magazine has in-house testing, and none has access to such advanced tests across all types of equipment. That’s why you can depend on Hi-Fi World reviews.
Six moving coil cartridges under £1000

World Designs KEL84 kit amplifier

Audio Analogue Cherubini tuner

Triology 907 dual mono phono stage

Inspire modified Thorens TD160 MkI turntable
MOVING COIL CARTRIDGES REVIEW  17
Tony Bolton reviews six moving coil cartridges under £1000

AMPLIFICATION
WAD KEL84 AMPLIFIER  38
Tony Bolton listens to the revived KEL84 kit from World Designs

DIGITAL
MAC MINI ITEM AUDIO AP SPECIAL  26
Rafael Todes and Noel Keywood look at a tuned-for-audio Mac Mini

PROJECT MEDIA BOX S PLAYER  47
Noel Keywood looks at a media player that reads from SD card and USB

LOUDSPEAKERS
MARTIN LOGAN MONTIS  12
Noel Keywood listens to a new hybrid electrostatic loudspeaker

TUNERS
AUDIO ANALOGUE CHERUBINI VT TUNER/USB/DAC  58
Paul Rigby reviews a tuner with a USB convertor

FEATURES
BRISTOL SHOW REPORT  71
Adam Smith and Noel Keywood report from the Bristol Show

OLDE WORLDE  78
Paul Rigby looks back at the Nakamichi Dragon cassette deck

MEDIA PLAYERS  44
Will media players replace CD? Noel Keywood investigates

WIGWAM FORUM SHOW REPORT  117
Noel Keywood visits a show with a difference, staged by a UK forum

SOUNDBITES
GRADO PS500 HEADPHONES  29
Paul Rigby dons Grado’s latest headphones

BLACK RHODIUM ARIA INTERCONNECTS DISCO ANTISTAT  43
Paul Rigby on items that help

SHURE SRH-1440 HEADPHONES  81
Paul Rigby listens in...

VINYL SECTION
NEWS  90
Paul Rigby has all the latest and greatest vinyl releases for you

INSPIRE THORENS TD160 UPGRADE  92
Adam Smith listens to a turntable upgrade package

TRILOGY 907 PHONOSTAGE  96
Tony Bolton listens to a new high end dual-mono phono stage

MISSION 774 TONEARM  99
Haden Boardman on an old classic

ROTHWELL RIALTO PHONOSTAGE  105
Tony Bolton listens to an all-discrete transistor phono stage

49 COMPETITION
Your chance to win a Tellurium Q phonostage in this month’s competition

7 NEWS
Words from the front...

30 MAIL
Seven pages of your views; no small amount of controversy here...

74 SUBSCRIPTIONS
Ensure your copy every month and save money too!

51 WORLD STANDARDS
Brand new, updated guide to the latest and greatest hi-fi hardware on sale.

64 WORLD CLASSICS
Brilliant designs that have stood the test of time...

76 AUDIOPHILE VINYL
Paul Rigby rounds up the latest audiophile vinyl releases

83, 85, 87, 89 OPINION
The team get to grips with matters music, hi-fi and life!

112 DIAL-A-DEALER
A comprehensive guide to UK hi-fi retailers

114 CLASSIFIEDS
Three pages of second-hand bargains

120 NEXT MONTH
What we hope to bring you in the next sizzling issue...

121 ADVERTISERS’ INDEX

122 CLASSIC CUTS
Paul Rigby listens to Deep Purple BBC Sessions 1968/70.
a worthy partner
M'INENT IMMINENT

New from GamuT is the M'inenT speaker series, including hand treated, all wood fibre, bass cones, hand treated 10-piece sliced midrange cones using a patented symmetric drive magnet system and a proprietary dynamic linear suspension plus double ring radiator tweeters for low diaphragm coloration.

Inside, the designs include complex impulse optimised bass reflex enclosures: a horizontal fan-shaped reinforcement internal structure built to achieve optimum dynamic linearity and acoustic damping.

Finally, the WormHole internal cable design consists of individual insulated conductors, with a special surrounding woven material that allows unwanted stored energy to be harmlessly steered to the ground.

There are three models in the offing. The GamuT M'inenT 3 (£5,230) features a 180mm sliced mid/bass unit and a double ring radiator tweeter. Spanning 400x226x455mm, it weighs 20kg and accompanying stands cost £1,490. The GamuT M'inenT 5 (£8,460) features a 180mm wood fibre bass cone, 180mm sliced midrange unit and an impulse and resonance optimised double ring radiator tweeter. Spanning 1210x226x575mm, it weighs in at 34kg. Finally, the GamuT M'inenT 7 includes two 180mm wood fibre units, a 180mm sliced midrange unit and an impulse and resonance optimised double ring radiator. It spans 1280x226x642mm and weighs in at 42kg.

Click on www.audioexperience.co.uk for more information.

TEAC GO AIRPLAY

The Teac CD-H700i is being marketed as a 'one box' solution for your musical needs as it features a CD player, a 40W amplifier, an internet radio, FM/AM/DAB radio and Airplay streaming plus a built-in phono amp for vinyl play plus network play via a hard disk and Ethernet or Wi-Fi connections. The unit includes a Burr-Brown DAC, spans 290x113x338mm and weighs in at 5.4kg. Click on www.teac.co.uk for more information.

BALANCED MODE RADIATORS

The Accolade Audio Model 1 speakers feature a 60mm BMR tweeter along with a 100mm paper bass unit. And BMR is? Balanced Mode Radiator - an energised, non-pistonic flat panel that is reported to remain linear up to and beyond 20000Hz. The apparent benefits of a BMR tweeter include the projection of a wider 'sweet spot' plus a reported superior imaging with an excellent off-axis response with the maintenance of clarity over different volume levels.

Spanning 300x160x210mm and weighing in at 10kg, the Model 1 is available in Oak, Black Oak and Cherry and is priced at £720. Contact 01562 865788 or click on www.accoladeaudio.com for more information.
**IT'S NOT CRICKET**

Not 20-20 just 20, the PMC twenty series of speakers triggers yet another anniversary, this time PMC's twentieth anniversary in the business. The new range consists of two stand mounted models, the twenty.21 and twenty.22 and two floor standers, the twenty.23 and twenty.24 - you can sense a theme can't you?

The line will include a new set of components including drive units, crossovers, binding posts, cabinets, plinths, spikes...the lot. Take the new Solonex fabric dome tweeter — created in conjunction with SEAS — that looks to produce a good off-axis response with the use of a new dispersion grille. Then there's the MI3 and MI7 mid/bass units that are an in-house design made from paper and built into a cast alloy chassis. Complete with sloping fronted chassis and PMC's own Advanced Transmission Line technology inside the cabinet, the speakers are available in Diamond Black, Oak, Walnut and Amarone.

Prices are: twenty.21, Amarone/Oak/Walnut £1,375, Diamond Black £1,485; twenty.22, Amarone/Oak/Walnut £1,825, Diamond Black £1,971; twenty.23, Amarone/Oak/Walnut £2,095, Diamond Black £2,304.50; twenty.24, Amarone/Oak/Walnut £3,100, Diamond Black £3,410.

Call 0870 444 1044 or click on www.pmc-speakers.com for more information.

**BLUE HORIZON PHONO AMP**

A new phono amp, designed to handle MM and MC cartridges, has been announced via Blue Horizon. Rather than cheap, inefficient, DIP switches, the Profono utilises a series of plug and shunt resistors to accurately set impedance; they plug into RCA sockets on the rear panel of the chassis. Standard shunts are supplied but Blue Horizon will custom make a unit to suit your cartridge if required.

Presented in a sturdy chassis and arriving with a separate power supply, the Profono is priced at £695. Click on www.bluehoriizonamps.com for more information.

**KUDOS TO KUDOS**

Kudos is celebrating the 21st anniversary of in-house speaker designer, Derek Gilligan, with the release of the Cardea Super 10 speakers. The Super 10 features the same cabinet as the C10 and arrives complete with a 29mm K2 tweeter and 180mm SEAS mid/bass driver that includes an aluminium phase plug. It acts as a heat sink that sits alongside a copper shorting ring to reduce eddy currents.

Featuring high quality capacitors and internal wiring direct from cable specialists, Chord, the Super 10 weighs in at 10kg per box and spans 350x200x270mm.

Available in Black Oak, Cherry, Oak, Walnut, Rosinut and Satin White, the new Kudos Cardea Super 10 speakers will set you back £3,495.

Call 01388 417177 for more information or click on www.kudosaudio.com.
**NEWS**

**SENNHEISER HIGH END PHONES**

The new, open backed, circumaural, dynamic HD700 headphones from Sennheiser, priced at £599, resemble their top-of-the-range HD800 in style but sit in-between the HD800 and the HD650 in terms of performance. The HD700s feature a new and unique gauze which is specially shaped to shape the diaphragm in the ear cups, reducing the volume of air beneath it and enhancing control over its movement. This design feature reportedly lowers the total harmonic distortion.

With specially designed ear cups to improve sound quality and a powerful neodymium magnet system, the HD700s arrive with a 3m cable and weigh in at 273g. Click on www.sennheiser.co.uk for more information.

**LET'S SAY GRACE**

Sansui — remember them? The company is back from a long period of hibernation with a host of new kit including: the 100W SAV-60I V integrated amp with a built-in DAC and valve pre-amp and phono circuit; the WLD-201 (£399) network player featuring a built-in DAB/DAB+ tuner and 15,000 internet station access, music streaming options via Ethernet and Wi-Fi, push button WPS security for ease of setup, support for FLAC, WAV, AAC, MP3, Real-Audio and WMA; the SAV-201V (£299) integrated amplifier with DAC is a 40W integrated amplifier featuring a MP3 socket while the CDD-201 (£199) CD player is available in silver and black.

Call 0871 288 6926 or click on www.sansui.co.uk for more information.

**AUDIOQUEST LINK-UP**

Audioquest has announced a range of new cables. The new NRG-X2 (£45/0.9m) and NRG-X3 (£65/0.9m) AC power cables tackle distortion using Long Grain Copper strands. The idea is to never let the strands change position and to keep them tightly packed which means that distortion arising from the interaction between the strands will be reduced. The enhanced purity plus less complicated grain further enhances the effect.

Next, Toslinks (from £21.50/0.75m). OK, they might not be as popular as they once where but they still have their uses. Audioquest’s new range includes cables offering narrow apertures in an attempt to prevent light dispersion and the impurities in the cable preventing all of the light reaching the other end of the cable.

Finally, the company has a range of interconnects to bedazzle you. There are seven models in the Bridges & Falls line that cover those made for iPod, 3.5mm male and female, RCA plugs and 5-pin DIN. Eight additional single and XLR cables include the Diamondback (£146/m), King Cobra (£215/m), Sky (£2,500/m), Wild Blue Yonder (£3,880) and WEL Signature (£6,400/m).

Contact 01869 600817 or click on www.sound-link.co.uk for more information.
Tickle your ears with real hi-fi sound

1010

Integrated Amplifier
CD Player

Please visit www.exposurehifi.com

Exposure Electronics Ltd:
Unit 18, Winston Business Centre
43 Chartwell Road
Lancing Business Park Lancing
BN15 8TU
Tel: +44 1273 423877
Fax: +44 1273 806048
DOUBLE DENSEN

Densen has announced the forthcoming release of its new, top-of-the-range, CD player, the B-475: the second Superleggera (i.e. super lightweight) product from Densen, the first being the B-275 preamp.

A two-box affair, to reduce cross contamination, the power supply can be found in a separate box. Known as the 2NRG, it contains three custom-made transformers, each with two separate windings.

While the transport is heavily modified, using an external clock control to avoid jitter by using the same clock to send and receive data.

The B-475 also adds a digital input, allowing the internal DAC to be used with external sources such as a Sonus system, a Squeezebox or another digital source.

Available in either Albino finish with chrome controls or black with either chrome or gold buttons. Price is £5,950. Contact 02477 220650 or click on www.kogaudio.com for more information.

CARDAS HEADPHONE CABLE

The Cardas Audio Clear headphone cable provides a separate cable for each ear with Matched Propagation conductors. The idea is to mimic a miniature pair of speaker cables for your headphones.

Compatible with Sennheiser Headphones (HD800, HD650, HD600, HD580, HD565 II, HD565, HD545, HD535, HD525 and HD265), Hi Fi Man, Audeze and AKG, the cable is available in both stereo phono and Cardas Golden XLR connectors for those with balanced systems.

Prices start from £499 inc.VAT for a 1.5 metre pair but you can also buy 3m and 4.5m lengths.

For more information call 020 8948 4153, email info@audiofreaks.co.uk or click on www.audiofreaks.co.uk for more information.

AVID PULSARE II

A sequel to Avid's popular phono amplifier has been announced. Adding switchable mono and subsonic filters, the Pulsare II now offers customisable resistance values via internal RCA sockets for perfect cartridge matching. The internal fitting has been included to maintain shielding of the fully balanced circuit.

Priced at £4,300, email info@avidhifi.co.uk or phone 01480 869900 for more information.
Martin Logan's new Montis hybrid electrostatic loudspeaker stands tall, is expensive and demanding, finds Noel Keywood. But it is amazing ...

Just sitting in front of the new Montis loudspeaker from Martin Logan made their design rationale obvious: they are big, very big. Not Tannoy Prestige series huge, but mightily imposing all the same. This loudspeaker is for the larger home, meaning a room at least 20ft long I'd suggest. It's also for the larger wallet, coming in at £9800 per pair. But the Montis gives a vast soundstage, beneath which you listen in awe. Martin Logan hybrid electrostatics are always a great listening experience and the new Montis is no exception.

The Montis stands 1.5 metres (5ft) tall to be precise, compared to 1 metre for most floorstanders, and 1.2 metres for big floorstanders; so this truly is a tall loudspeaker. It fires down at listeners, giving a celestial presentation of electrostatic clarity and purity — and that is the biggest difference between the Montis and its slightly shorter stablemates, many of which I have reviewed and know well. I noticed this difference immediately when listening to the Montis and it is the loudspeaker's primary distinguishing feature I feel.

Like all Martin Logans though, the Montis is fairly slim, measuring 32cms wide, and it isn't especially deep at 46cms. Even though each loudspeaker is fitted with a 200 Watt amplifier to power the bass unit, weight is a very movable 26kgs (58lbs), making the Montis quite easy to manoeuvre into position, or out of the way for Hoovering even. The bass cabinet is available in Black Ash, Dark Cherry or Zebrawood hand-rubbed wood veneers and a clear Alloy Frame costs £10,998 per pair.
But let me take you through a quick sweep of what this most
unusual, see-through loudspeaker is, technology wise. Being an elec-
tronic means it produces sound from a sheet of clear film, a bit like
Clingfilm. Being gossamer light it does not store energy, meaning there is no
overhang, or coloration. It is also driven over its entire surface, and
damped by the air load too, for more even and controlled behaviour. There
is no box to absorb rear energy, another great benefit, although what
goes on behind an electrostatic dipole is worth giving some consid-
eration, I have found from living with Quad electroatotics.

Being big means Martin Logan's XStat electrostatic panel reaches
down lower, covering more of the audio band than their smaller panels.
It reaches from 20kHz all the way down to 370Hz they say, meaning much
of the audio band, but not the lower tones of the human voice, or
larger instruments like cellos, nor any of the power in Rock percussion of
course, and bass guitar plays through the bass bin alone. On the Montis
this is configured in the company's preferred manner, the audio signal
being converted to digital through an ADC, fed to a Digital Signal
Processor (DSP) for processing and then through a digital-to-analogue
convertor (DAC) and into a 200 Watt Class D power amplifier that
drives a 10in bass unit fitted with an aluminium cone.

There is only one pair of input terminals, and the external amplifier
used to drive the Montis only drives the electrostatic panel directly; it
does not drive the bass unit. This gives the Montis very high sensitivity,
so even when I played them with powered bass unit and very
low settings of 2 or so on a scale

construction is a particular strength, since the intervening protective
layers of a Quad electrostatic do detract a little from their potential,
I have found from stripping Quads down progressively in the past.

Martin Logan's XStat panel comes fully sorted, as it were — and it can
even be Hoovered to remove dust they say. It is fed by a passive high
pass crossover.

The compact bass cabinet of the Montis is not ported, unlike
other Martin Logans, and I believe the aluminium cone bass unit is
new too. I suspect the idea here is to 'speed up' bass a bit, because
Martin Logan bass isn't the fastest around, but there is quite a lot to
this subject. The company attempt to get powerful low bass from a very
small cabinet and there are inevitable difficulties here that affect sound
quality.

Mains power is needed for each

"if you want to hear a jaw
dropping loudspeaker then this is it"
reasonably room tolerant all the same. Their dispersion is so wide that when walking around them the sound balance does not alter greatly. This makes them enjoyable even to those not sitting in the 'sweet spot'.

And now to the subject of the amplifier... My strong advice here is to use a valve amplifier. The Montis is very revealing and its impedance drops to around 1 Ohm at 20kHz. An Audiolab 8200A refused to go much past third-volume before its protection circuits operated to protect the output transistors from excessive high frequency current. Valve amplifiers do not suffer this – and they also sound better. The hard, grainy quality of most transistor amplifiers is grimly revealed by these loudspeakers. Surprisingly, even our Icon Audio MB845 MkII B45 equipped monoblock amplifiers lost their easy treble quality through the Montis, because the loudspeaker has such strong treble. Bright sounding amplifiers do not suit – and that narrows choice. I would be tempted to audition with Single-Ended amplifiers using 6C33Cs or perhaps sweet 2A3s, or 300Bs. The Montis don't give a very good impression when used with transistor amplifiers; bear this in mind when auditioning them. I have heard very good loudspeakers sound awful with the many bad transistor amplifiers that torture us with their presence and the Montis is both very revealing of system limitations and not balanced to compensate for bright or harsh treble in system components.

Loudspeakers like this are always difficult to match but the Montis especially so because it puts out so much high frequency energy. The Montis absolutely demanded a full 30 minutes warm up of our valve amplifiers and 1 hour or over was best; they are horribly revealing. But with Jackie Leven standing large over me singing about the Pentland Firth in his deep, rich but melancholy tones the Montis showed just what they could do. Martin Logan's XStat panel painted up a massive picture in front of me, one that hung together and were set in stark clarity.

A feature of the Montis that is different from other Martin Logan loudspeakers I have reviewed is that they run up to 20kHz without flinching and treble comes across as strong. Even when carefully placed the Montis threw out a lot of treble energy and they can come across as bright in balance and a little hard, especially with transistor amplifiers. After hearing this I spent a lot of time re-measuring and attribute the effect to off-axis balance, even though we use absorber panels to absorb such energy. With CD all but the best recordings sounded a trifle challenging, even through our mild sounding Electrocompaniet ECD1 DAC. I expected LP to sound warmer but it barely did. With an Ortofon Cadenza Bronze, SME 312S, Garrard 401 and Icon Audio PS3 phono stage, strong treble was still there, but the glassy quality and occasional spit of CD had gone. The Montis gave LP a CD-like balance though. However, being an electrostatic you have to understand that the quality of brightness is different to that of the usual dome tweeter. Treble was clear and even in balance; there was no spikiness or peakiness. It was just powerfully projected. The Montis is not such an easy listen as other Martin Logans in this respect and it is very demanding of partnering equipment as a result. Bearing in mind that the XStat panel is surgically revealing, source components get sonically shredded by this loudspeaker. I got a thumbs down from Martin Logan fan Sharon Mehlhorn of Hi-Fi World on this point until a lot of component changing ameliorated the issue. Rafael Todes insisted we change our mains cable links, swap to a Cyrus CD transport and much else and of course every change made a difference but the Montis gave fabulous results. Although challenging I still found this loudspeaker nothing other than massively impressive, but it remained starkly revealing rather than warm or cuddly.

When I spun a 12in, 45rpm single of Alison Goldfrapp's 'Ride a White Horse', its driving beat and enormous dynamics thundered out from the Montis; they can deliver enormous levels – with a speed and precision that borders on brutal. The Montis is a 'take no prisoners' listen, one that is academically correct; it is nothing other than a superb iteration of the Martin Logan XStat panel that they continue to develop.

Working through a wide variety of well recorded albums the Montis maintained its forensic demeanour. Which brings me to source matching again. With LP the Montis needs an Ortofon Cadenza Black or A90 moving coil cartridge, both of which have a smooth, easy balance and are a good quality match. I would steer clear of, for example, a Lyra Titan i, which although impressive in its own way would not suit the Montis. This fussiness is what you might expect from a demanding £9800 electrostatic loudspeaker perhaps, but it is worth bearing in mind, especially with regard to an unsatisfactory dealer demo. Choice of partnering equipment is crucial with such a loudspeaker.

Open electrostatic panels lack the chestiness of box loudspeakers...
and give an airier but arguably less substantial sounding lower midrange. In truth what electrostatics lack is boxiness and the thrum that it produces. We exploited this by using an open-backed midrange enclosure in Hi-Fi World’s KLS-6 loudspeaker (Aug 1995 DIY Supplement 16 - drive units now unavailable). Because the Montis XStat panel is almost ruler flat in frequency response vocals and instruments are reproduced with perfect equanimity: there are no crossover dips to soften the sound and no treble peaks to falsely emphasise detail. Yet like all Martin Logans the Montis are intensely detailed in a way that shades cone loudspeakers. It’s just that, with the Montis, Martin Logan have gone with a sound balance where frequency extremes are very strongly produced. A big room, with high ceilings and heavy curtains and carpets would best suit. Even our use of rear acoustic damping panels, as well as side wall acoustic damping panels to lessen the main side wall reflection were not sufficient to curtail the Montis treble power in our set up.

With the rear level control set to 0 bass came across as fulsome and powerful. Our frequency response graph suggests massive bass lift but because of the acoustic power output of the electrostatic dipole it matches the bass unit subjectively better than the graph suggests. Bass quality is good, at least with resonant drum strikes such as the lone strike I use as a guide at the start of Angelique Kidjo’s ‘Agolo’. There was plenty of power, a good sense of control and obvious subsonic bass. The Montis has a generously large sound in this area, matching its massive sound stage. Turning bass down to -2 or so removed the fulsome quality and dried bass out. The level control is very sensitive and do not need a lot of power, 40 Watts from a good valve amp being enough to play very loud. The bass bin draws no power of course as it has its own amplifier.

Our decay spectrum showed a sharp discontinuity between the XStat panel and the hard working bass bin, the latter emitting a lot of time delayed energy from within the cabinet, out through the bass cone. A high pass filter at 40Hz would lessen this and clean things up. The Montis measures better than ever as Martin Logan refine their loudspeakers. It is super smooth and super accurate. However, with broad lateral dispersion and dipole radiation it puts a lot of energy into a room. The dip at 180Hz is due to our room.

As always with Martin Logan, bass has been set on the generous side with the bass control at 0; it measured +3dB up as seen in our graph and will give ‘obvious’ bass. Flat response was available at -3 on the control. The bass gain range was huge, with a maximum of +12dB 1Hz. Martin Logan work the bass bin hard, pushing it down to 20Hz, which is why our 20ft square room went off strongly at 24Hz, inserting a massive subsonic peak. So the loudspeaker goes low, but big LF excursions in the bass unit generate distortion.

In the Montis the XStat panel sees the amplifier direct and above 3kHz impedance drops steadily below 5 Ohms, reaching just 1 Ohm at 29kHz - almost a dead short! In some circumstances, such as compressed music played loud, this will trip the protection circuits of an amplifier driving the Montis. It did so with an Audiolab 8200A we used. Valve amps withstand this and are best used.

Sensitivity was high, measuring 90dB SPL for one nominal watt (2.84) of input (bass at -3), although in truth this is a 4 Ohm loudspeaker so we actually put 2 Watts into it, meaning a true watt gives 87dB. However, we always quote voltage sensitivity to relate to volume control position and how a user ‘sees’ the situation. The Montis are sensitive and do not need a lot of power. 40 Watts from a good valve amp being enough to play very loud. The bass bin draws no power of course as it has its own amplifier.

Our decay spectrum showed a sharp discontinuity between the XStat panel and the hard working bass bin, the latter emitting a lot of time delayed energy from within the cabinet, out through the bass cone. A high pass filter at 40Hz would lessen this and clean things up. The Montis measures better than ever as Martin Logan refine their loudspeakers. It is super smooth and super accurate. However, with broad lateral dispersion and dipole radiation it puts a lot of energy into a room. The dip at 180Hz is due to our room. As always with Martin Logan, bass has been set on the generous side with the bass control at 0; it measured +3dB up as seen in our graph and will give ‘obvious’ bass. Flat response was available at -3 on the control. The bass gain range was huge, with a maximum of +12dB 1Hz. Martin Logan work the bass bin hard, pushing it down to 20Hz, which is why our 20ft square room went off strongly at 24Hz, inserting a massive subsonic peak. So the loudspeaker goes low, but big LF excursions in the bass unit generate distortion.

In the Montis the XStat panel sees the amplifier direct and above 3kHz impedance drops steadily below 5 Ohms, reaching just 1 Ohm at 29kHz - almost a dead short! In some circumstances, such as compressed music played loud, this will trip the protection circuits of an amplifier driving the Montis. It did so with an Audiolab 8200A we used. Valve amps withstand this and are best used.

Sensitivity was high, measuring 90dB SPL for one nominal watt (2.84) of input (bass at -3), although in truth this is a 4 Ohm loudspeaker so we actually put 2 Watts into it, meaning a true watt gives 87dB. However, we always quote voltage sensitivity to relate to volume control position and how a user ‘sees’ the situation. The Montis are sensitive and do not need a lot of power, 40 Watts from a good valve amp being enough to play very loud. The bass bin draws no power of course as it has its own amplifier.

Our decay spectrum showed a sharp discontinuity between the XStat panel and the hard working bass bin, the latter emitting a lot of time delayed energy from within the cabinet, out through the bass cone. A high pass filter at 40Hz would lessen this and clean things up. The Montis measures better than ever as Martin Logan refine their loudspeakers. It is super smooth and super accurate. However, with broad lateral dispersion and dipole radiation it puts a lot of energy into a room. The dip at 180Hz is due to our room. As always with Martin Logan, bass has been set on the generous side with the bass control at 0; it measured +3dB up as seen in our graph and will give ‘obvious’ bass. Flat response was available at -3 on the control. The bass gain range was huge, with a maximum of +12dB 1Hz. Martin Logan work the bass bin hard, pushing it down to 20Hz, which is why our 20ft square room went off strongly at 24Hz, inserting a massive subsonic peak. So the loudspeaker goes low, but big LF excursions in the bass unit generate distortion.

In the Montis the XStat panel sees the amplifier direct and above 3kHz impedance drops steadily below 5 Ohms, reaching just 1 Ohm at 29kHz - almost a dead short! In some circumstances, such as compressed music played loud, this will trip the protection circuits of an amplifier driving the Montis. It did so with an Audiolab 8200A we used. Valve amps withstand this and are best used.

Sensitivity was high, measuring 90dB SPL for one nominal watt (2.84) of input (bass at -3), although in truth this is a 4 Ohm loudspeaker so we actually put 2 Watts into it, meaning a true watt gives 87dB. However, we always quote voltage sensitivity to relate to volume control position and how a user ‘sees’ the situation. The Montis are sensitive and do not need a lot of power, 40 Watts from a good valve amp being enough to play very loud. The bass bin draws no power of course as it has its own amplifier.

Our decay spectrum showed a sharp discontinuity between the XStat panel and the hard working bass bin, the latter emitting a lot of time delayed energy from within the cabinet, out through the bass cone. A high pass filter at 40Hz would lessen this and clean things up. The Montis measures better than ever as Martin Logan refine their loudspeakers. It is super smooth and super accurate. However, with broad lateral dispersion and dipole radiation it puts a lot of energy into a room. The dip at 180Hz is due to our room. As always with Martin Logan, bass has been set on the generous side with the bass control at 0; it measured +3dB up as seen in our graph and will give ‘obvious’ bass. Flat response was available at -3 on the control. The bass gain range was huge, with a maximum of +12dB 1Hz. Martin Logan work the bass bin hard, pushing it down to 20Hz, which is why our 20ft square room went off strongly at 24Hz, inserting a massive subsonic peak. So the loudspeaker goes low, but big LF excursions in the bass unit generate distortion.

In the Montis the XStat panel sees the amplifier direct and above 3kHz impedance drops steadily below 5 Ohms, reaching just 1 Ohm at 29kHz - almost a dead short! In some circumstances, such as compressed music played loud, this will trip the protection circuits of an amplifier driving the Montis. It did so with an Audiolab 8200A we used. Valve amps withstand this and are best used.

Sensitivity was high, measuring 90dB SPL for one nominal watt (2.84) of input (bass at -3), although in truth this is a 4 Ohm loudspeaker so we actually put 2 Watts into it, meaning a true watt gives 87dB. However, we always quote voltage sensitivity to relate to volume control position and how a user ‘sees’ the situation. The Montis are sensitive and do not need a lot of power, 40 Watts from a good valve amp being enough to play very loud. The bass bin draws no power of course as it has its own amplifier.

Our decay spectrum showed a sharp discontinuity between the XStat panel and the hard working bass bin, the latter emitting a lot of time delayed energy from within the cabinet, out through the bass cone. A high pass filter at 40Hz would lessen this and clean things up. The Montis measures better than ever as Martin Logan refine their loudspeakers. It is super smooth and super accurate. However, with broad lateral dispersion and dipole radiation it puts a lot of energy into a room. The dip at 180Hz is due to our room. As always with Martin Logan, bass has been set on the generous side with the bass control at 0; it measured +3dB up as seen in our graph and will give ‘obvious’ bass. Flat response was available at -3 on the control. The bass gain range was huge, with a maximum of +12dB 1Hz. Martin Logan work the bass bin hard, pushing it down to 20Hz, which is why our 20ft square room went off strongly at 24Hz, inserting a massive subsonic peak. So the loudspeaker goes low, but big LF excursions in the bass unit generate distortion.

In the Montis the XStat panel sees the amplifier direct and above 3kHz impedance drops steadily below 5 Ohms, reaching just 1 Ohm at 29kHz - almost a dead short! In some circumstances, such as compressed music played loud, this will trip the protection circuits of an amplifier driving the Montis. It did so with an Audiolab 8200A we used. Valve amps withstand this and are best used.

Sensitivity was high, measuring 90dB SPL for one nominal watt (2.84) of input (bass at -3), although in truth this is a 4 Ohm loudspeaker so we actually put 2 Watts into it, meaning a true watt gives 87dB. However, we always quote voltage sensitivity to relate to volume control position and how a user ‘sees’ the situation. The Montis are sensitive and do not need a lot of power, 40 Watts from a good valve amp being enough to play very loud. The bass bin draws no power of course as it has its own amplifier.
The Q Series from KEF represents a quantum leap in terms of listening pleasure. From compact bookshelf designs to serious hi-fi speakers and dynamic home cinema systems, all available in a choice of beautiful luxury finishes, the highly versatile nine-model line-up will truly satisfy your need for class-leading audio purity.

So whether it's music or movies, Mahler or Massive Attack, what you experience is the captivatingly sweet, accurate and natural live sound of the original performance.

'...in many respects it is exceptional at the price in terms of the power and physicality it offers.'

Q700 - Hi-Fi Choice Magazine - March 2012
These days, beautiful sounds can come from affordable moving coil cartridges, Tony Bolton finds. We test six models under £1000.

Traditionally moving coil cartridges have been the route to audio nirvana, albeit, usually an expensive one. Cheap MCs have tended to be a little brash and prone to somewhat forceful treble in the past. More recently things have improved and nowadays we can expect quite high standards from a cartridge costing around £500 or more.

To test just how high the standard has risen we have assembled a range of cartridges for this round up, starting at £430 with the long established Denon DL304 ranging up to the Van Den Hul DDT-II Special at £995. Most of the contenders fall into a band between £500 and £600 though, with the new Ortofon Rondo Blue (£525), the recently upgraded Audio Technica ATOC9MLIII, the Goldring Legacy and Benz Micro Ace L costing £595. Yes, there’s competition here because this is a popular sector with buyers looking for Moving Coil quality at little more than Moving Magnet prices. For as experienced audiophiles know, MC cartridges can cost thousands.

Each cartridge in this group was played for at least ten hours to get most of the running-in process done, and then tried in both the Hadcock 247 Cryo arm on my Sondek and the Clearaudio Magnify turntable attached to a Master Solution turntable. Phonostages included the Leema Acoustics Agena, GSP Audio Revelation and Elevator EXP step-up, and briefly the Rothwell Rialto and Trilogy 907 reviewed elsewhere in this issue.

I trawled through my record collection with this lot over several days, and eventually settled on a selection of four records (listed below) for the comparative listening which was carried out on the Clearaudio turntable and arm. I ran all of the cartridges at the manufacturer’s recommended downforce and impedance settings, and where there were no recommended capacitance settings I experimented with different values until I felt that the sound was correct.

It has been an interesting grouping, with a few surprises along the way. Some of the cartridges are already known to me whilst others are new acquaintances. All have proved entertaining in their own way. So without more ado, lets cue up the first record and get listening ...
DENON DL-304 £429.95

DENON started out as the Nippon Columbia Company in 1910 manufacturing records and gramophones. The name came out of the 1947 merger of this company with Japan Denki Onkyo. They have been making cartridges for many years, the DL103 being introduced in 1964 and is still in production. The DL304 under discussion here is a more recent design but has still been around for over a decade.

It comes with an eye catching gold coloured aluminium alloy body with an elliptical (0.07 x 0.11mm) solid diamond tip on the cantilever. Output is very low which wasn't a problem for the Agena with it's ability to match most cartridges, but could be unsuited to some other phonostages. (The Rothwell Rialto reviewed elsewhere in the issue lacked enough gain with this cartridge to give a satisfactory output without turning the volume up quite a lot.)

This is one of those cartridges that doesn't immediately impress but wins the listener over as you realise what a generally neutral performer it is. Copland's 'Appalachian Spring' ballet music starts gently as the characters are introduced and then builds into a complex burst of strings. It was written for a thirteen piece chamber orchestra and I felt as though each of the performers was securely placed in a semi-circle in front of me. The imaging was helped by a very lucid mid-band which seemed to present micro-details of the bowing in an unobtrusive way that seeped into my consciousness. Rather more raw sounding material from Janis Joplin was handled with equal aplomb, with Janis' voice, always difficult to reproduce correctly, displaying the gravelly throatiness for which she was known, without creating harsh or abrasive sounds from it, as so many cartridges can do. The guitars had a cutting edge to them that wasn't over emphasised, but should satisfy most fans of the genre.

The gentle electronica of Air's 'Moon Safari' proved easy fodder for the Denon, with again an unflustered air to the proceedings that seemed an honest rendition of what was in the grooves. The soundstage was deceptively large, the appearance of noises at the extreme edges serving to locate it's boundaries. Even older mono records were treated with respect, surface noise being of minimal intrusion, and the focus staying firmly on the musical contents of the groove, rather than on it's condition. I found the DL304 to be a solid performer that I grew to like more with each track that I played. I liked the ease and sense of balance to the sound, where the bass treble and mid seemed to get equal billing. It also seemed to display an even handed attitude to musical genre. The only drawback that I found was the low output and consequent matching problems, but if this can be solved then the Denon DL304 seemed a well balanced and self effacing performer.

Square body is sturdy and easy to align properly.

**MEASURED PERFORMANCE**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output (5cms/sec rms)</td>
<td>0.18mV</td>
</tr>
<tr>
<td>Tracking force</td>
<td>1.2gms</td>
</tr>
<tr>
<td>Weight</td>
<td>7gms</td>
</tr>
<tr>
<td>Vertical tracking angle</td>
<td>25degrees</td>
</tr>
<tr>
<td>Frequency response</td>
<td>20Hz - 20kHz</td>
</tr>
<tr>
<td>Channel separation</td>
<td>28dB</td>
</tr>
<tr>
<td>Tracking ability</td>
<td>65µm</td>
</tr>
<tr>
<td>lateral</td>
<td>45µm</td>
</tr>
<tr>
<td>vertical</td>
<td>1%</td>
</tr>
<tr>
<td>Distortion (45µm)</td>
<td>20cms/sec.</td>
</tr>
<tr>
<td>lateral</td>
<td>3%</td>
</tr>
<tr>
<td>vertical</td>
<td>3%</td>
</tr>
</tbody>
</table>

**FREQUENCY RESPONSE**

- Green - outer grooves
- Red - inner grooves

Output from the DL-304 was very low, measuring just 0.18mV at 5cms/sec/rms and this demands use of a phono stage that is very quiet and has plenty of gain, 70dB or more. Even then mild hiss may be just audible.

At the unusually low tracking force of 1.2gms tracking was poor, so 1.4gms was used, the quoted upper limit. This gave good results, although still way off what is possible, with a high lateral 63µm being cleared and 20cms/sec at 1kHz. The Denon cleared high level test tracks, but not the highest torture tracks.

Frequency response was almost ruler flat right out to 20kHz, almost as flat as CD! On inner grooves tracing loss introduced a small amount of treble fall, just enough to soften the sound a tad. This is a very accurate and neutral cartridge.

The vertical tracking angle measured 25 degrees. As a result distortion was low at 3% on vertical modulation, mostly second and third harmonics. Lateral distortion was also low, measuring 1%. The Denon DL-304 needs a top quality phono stage, but it otherwise measures well and may well sound very good. NK.
The Ortofon range of MC cartridges seems to be constantly expanding. The Rondo series form a range below that of the Cadenzas and above the Vivo pair. The body is made of a ground wood/resin composite. Beneath this hangs an aluminium cantilever with a Nude FG70 stylus attached. It tips the scales at 10.5 grams so is only just within the balance limits of most arms. Alignment was easy with the straight edges to the body and the very visible cantilever. A flip down stylus guard is provided. After a little listening I unclipped it entirely, rebalanced the arm and found a small but useful improvement in the sound quality. It seemed to sound a bit more secure in the groove and to have a little more air and space in the sound.

I started again with the Copland and found a slightly more delicate and gentle sound than I had been listening to from the Denon. It seemed very well suited to the sound of this chamber orchestra, picking out little details in the performer’s technique that fleshed out the sonic image somewhat. It seemed to offer a taste of the higher levels of refinement that have always made MCs such a sought after product.

Although the risqué nature of some of the lyrics seems quite tame now, it is easy to imagine the reaction of middle America at the end of the Eisenhower era to songs such as ‘Since I Became A Hussy For My Husband!’ Backed by an orchestra conducted by Don Redman, which swung along nicely in a post Benny Goodman style of jazz. Bailey’s voice took centre stage and displayed enough forthright attitude that the listener was left in no doubt that this was a woman who knew what she wanted, and just how to get it! The Rondo Blue made quite a good job of displaying this, creating an image of the seasoned cabaret and club performer confident in her singing, and with a powerful delivery should the song so require.

It was less happy when faced with Janis’ throaty wailings and howling guitars, seeming to shy away from the rawness and emotional power of the performance. It sounded a bit too mannered to be really convincing or a satisfying listen. Put bluntly, it didn’t seem to have the guts to deal with such wild and vulgar guitar sounds and vocal behaviour.

An angular body and high weight make the Ortofon less arm friendly than many.

The Ortofon Rondo Blue is £525.00

Henley Designs
(T +44 (0)1235 511166
www.henleydesigns.co.uk

FOR
- very good with classical
- gentle and subtle sound
- focussed image

AGAINST
- a bit restrictive on musical genre
- easily overwhelmed by musical information.
The Audio Technica AT-OC9 ML series dates back two decades now, and the cartridge is now in Mark III form. The body of this new version, introduced in 2010, retains the family styling with the traditional gold colour retained for the lower half of the body, and a rather smart black finish applied to the top part where the mounting holes are. This model was unusual amongst this group in using bolts and screws to locate it in the arm, rather than the blind tapped holes of most contenders here.

There is a line contact stylus embedded into a solid boron cantilever which transmits movement to dual PCOCC wire coils (Pure Copper by Ohno Continuous Casting). This is claimed to give excellent stereo separation.

Like the Ortofon and the Denon, the square edges to the body made setting it up easy and I was soon sitting back and listening to the 'Appalachian Spring'. Here I found a very different presentation to the even handed Denon and the gentle Ortofon. The Audio Technica was not backward in coming forward, with a well lit soundstage and very well defined treble. I have never been a great fan of the previous models, finding them rather too forward for my taste and too eager to focus on groove wall wear and tear. This new model seemed somewhat better behaved in that respect, but was still no shrinking violet, providing a very detailed description of the actions of bow on string.

The upside of this was a very precisely populated soundstage where I felt that I was privy to every single nuance of the performer's movements. Compared to previous models the bass output seemed a bit less skewed to the upper mid and high frequencies, and spread downwards a bit more. The 'Kozmic Blues' LP was introduced a small amount of treble fall above 20kHz. Inner groove tracing loss unerringly close to the OdB datum right up to 20kHz. Inner groove tracing loss was just 0.5%.

The improvements in the OC9 became really apparent when playing the Pearl Bailey LP. It is in pretty good condition and this new cartridge played it without too much focus on any odd pops and crackles and instead dug into the music more, displaying a good sense of rhythm and extracting a wealth of musical information from 52 year old grooves. I would still have liked a bit more focus on the lower notes but I felt it was improved somewhat in this area over it's predecessor.

The OC9 needs pass through bolts and nuts to fix it, but alignment is easy.

**FREQUENCY RESPONSE**

<table>
<thead>
<tr>
<th>Frequency (Hz)</th>
<th>Response (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20Hz - 20kHz</td>
<td>24dB</td>
</tr>
<tr>
<td>25cms/sec</td>
<td>26dB</td>
</tr>
</tbody>
</table>

**MEASURED PERFORMANCE**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tracking force</td>
<td>1.25-1.75gms</td>
</tr>
<tr>
<td>Weight</td>
<td>8gms</td>
</tr>
<tr>
<td>Vertical tracking angle</td>
<td>24degrees</td>
</tr>
<tr>
<td>Frequency response</td>
<td>20Hz - 20kHz</td>
</tr>
<tr>
<td>Channel separation</td>
<td>90µm</td>
</tr>
<tr>
<td>Tracking ability (300Hz)</td>
<td>45µm</td>
</tr>
<tr>
<td>Vertical lateral</td>
<td>25cm/sec</td>
</tr>
<tr>
<td>Distortion (45µm)</td>
<td>0.5%</td>
</tr>
<tr>
<td>Output (5cm/sec rms)</td>
<td>0.57mV</td>
</tr>
</tbody>
</table>

**GROUP TEST**

**AUDIO TECHNICA AT OC9 MLIII £549.00**

**VERDICT**

New version of respected cartridge with a very defined sound.

Audio Technica AT-O9 MLIII £549.00

Henley Designs
(C) +44 (0) 1235 511166 www.henleydesigns.co.uk

FOR
- Strong imaging.
- Excellent treble detail.
- Improved bass response.

AGAINST
- Can be too forward for some tastes.
Costing exactly the same as the Goldring Legacy, the Benz Micro Ace (Advanced Cartridge Engineering) uses a micro-ridge stylus in this, its latest incarnation. There are three versions, with differing output levels, this being the low output model, as signified by the L in the title. I reviewed this back in the May 2011 issue of this magazine and was very enamoured with the combination of detail and solidity to the sound. Indeed we were so impressed at World Towers that we gave it a Globie Award in the January 2012 issue.

The square edges to the body and visible cantilever made alignment easy and in a few moments I was listening to the Copland piece. I found that the Ace trod a very careful line between the deep solidity of the Goldring and the very open sound of the Audio Technica. I initially felt that the Goldring had a bit more heft at the bottom end but came to the conclusion that this was an erroneous impression caused by the relative lack of high frequency activity from the Legacy. On the other hand, compared to the OC9, I felt that the Ace struck a better balance between high frequency detailing and connecting that in a more fluid way with the music in the mid and lower bands. The thirteen stringed instruments in the chamber orchestra seemed to have an easy, and I felt, more realistic balance than with any other cartridge here apart from the Denon. But here, there was enough output to drive any phonostage satisfactorily, with the perception of greater dynamic range and impact that this allowed.

Changing musical gear dramatically and playing the Joplin showed the musical flexibility of this cartridge. Having displayed a deft touch with classical music, it seemed perfectly happy to roll up its sleeves and muck in with the unrestrained wailings of both voice and guitar without doing a disservice to either type of music. I felt aware of Janis’ angst as she sang ‘Little Girl Blue’ and enjoyed the boogying bass guitars of ‘Try’. ‘Air’ sounded complete and well described, with enough detail across the bandwidth to be satisfying, but without the tendency to etched detail that the Audio Technica presented.

This was also true of the ‘Naughty But Nice’ LP, where the focus stayed resolutely on the music and Pearl’s voice, providing the husky hints that the Legacy displayed, but combining this with subtleties of articulation provided by the OC9. I also liked the way it seemed to give me the sensation of a treble that soared away into the clouds, yet it played it’s way through a 52 year old mono record with virtually no surface noise disturbance whatsoever.

An excellent performance that combined detail and musicality.

An eye catching non-magnetic body at a weight most arms can manage, 8.8gms.

<table>
<thead>
<tr>
<th>MEASURED PERFORMANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frequency response</strong></td>
</tr>
<tr>
<td>- of the Ace rolled down slightly toward high frequencies. Tracing loss on inner grooves will result in a warm balance toward inner grooves. The Ace remains very accurate and smooth in its response though, as before.</td>
</tr>
<tr>
<td><strong>Distortion levels were very low, due to vertical tracking angle measuring a correct 21 degrees. This resulted in just 1% vertical distortion. Output was high at 0.8mV so hiss will not be a problem with most phono stages.</strong></td>
</tr>
</tbody>
</table>

* BENZ MICRO ACE SL £595.00

**VERDICT**

Smooth, lucid and full bodied, award winning, hand made cartridge from Switzerland.

Benz Micro Ace SL £595.00
Select Audio
(+44 (0)1900 813064
www.selectaudio.co.uk

**FOR**

- Solid and grounded sound.
- Excellent imaging.
- Tight timing.

**AGAINST**

- nothing
The Goldring Legacy was introduced in October 2009 as the Company’s flagship product. It features an ultra low resonance magnesium metal body with threaded inserts for the mounting screws. The stylus is a low mass “Vital” design which is attached to a hard alloy cantilever. A bespoke rubber mixture acts as a damper. The coils are made of high purity copper and interact with Neodymium iron boron magnets to create the electrical signal.

It is very well presented, coming in a leather effect case, with the cartridge housed in a cut out in the hard-wood block that sits inside. Although the cartridge’s curved body shape is pleasingly elegant, it is not very helpful when it comes to aligning the cartridge in an arm, so this took a little longer than with any other cartridge in this group.

After listening to the Audio Technica, the Goldring was almost the opposite in sonic delivery. The bass strings in ‘Appalachian Spring’ had a full bodied tonality and structure that was quite satisfying and provided an good base for the fairly open sounding mid-range to sit upon. This openness gradually disappeared as I listened up the musical scale, leaving a high treble that was a bit too soft and gentle in comparison to the solid weight of bass below it. The imaging was good, with the orchestra spread around in front of me, with the perception that each player had enough elbow room around them to move freely.

The Pearl Bailey LP was played well. Any apparent surface noise was pretty much ignored and the swinging beat to the music romped along in a pleasing manner. Pearl’s voice was well described, a little in front of the band, although nowhere near as well lit as she had been by the OC9. The Legacy’s slightly dark tonality emphasised the slight huskiness in her voice and this added a certain spice of wickedness to her delivery of some of the “fruitier” lyrics.

The gentle electronics of ‘Moon Safari’ fared a little less well with this cartridge. The softening of the treble left me with the feeling that some of the sonic effects had missed their mark by lacking enough space and air around them in which to move freely.

By the same token, ‘Kozmic Blues’ seemed a little emasculated with both Joplin’s voice and the guitars lacking a certain bite, which I feel is essential to the correct reproduction of this type of music.

The Legacy had one thing in common with the Denon; very low output. Again, I had to turn the volume control up quite a way beyond my normal levels when using a fixed gain phono stage such as the Revelation or the Trilogy, so careful matching would be required to avoid potential hiss problems.

The solid magnesium body of the Legacy is light at 8gms, but not so easy to align.

**MEASURED PERFORMANCE**

- **Tracking force**: 1.75gms
- **Weight**: 8gms
- **Vertical tracking angle**: 30degrees
- **Frequency response (20Hz - 20kHz)**: 20Hz - 20kHz
- **Channel separation**: 21dB
- **Vertical tracking (300Hz)**: 25cms/sec
- **Distortion (45µm)**: 1%
- **Output (5cms/sec rms)**: 0.25mV

**FREQUENCY RESPONSE**

- **Green - outer grooves**
- **Red - inner grooves**
This is a cartridge with a long history. The original DDT (which stands for Depth, Detail and Timbre) was A. J. Van Den Hul's second cartridge design, and the first to be released under his own name in 1983. Over the years various upgrades have been introduced, including a better shaped front pole and better dampers. The suspension wire diameter has been reduced and an extra support magnet introduced at the front pole. The Special designation means that it comes equipped with an 85 x 1.5 micron stylus which is shared with the high-end Colibri model; it is mounted on a boron cantilever. The stylus comes from the centre of an octahedral diamond which produces predictable and regular shapes after processing, unlike synthetic diamonds which can vary in shape somewhat. The coils are made of crystal silver wire.

After a few minutes spent setting the DDT-II Special up, I played the 'Appalachian Spring' and was immediately hit by the increased levels of definition and shape that spending a lot more on a cartridge could bring to the proceedings. Good though I felt the Benz to be, the Van Den Hul provided a more holographic shape to the sound. The differing levels of definition and shape that the Van Den Hul treated them all with aplomb, seeming to reach into her heart to extract that little extra bit of emotion. Despite it's ease with well mannered classical sounds it seemed unfazed by the potentially abrasive mixture of guitar, organ, tenor and baritone sax, and trumpet. Each seemed planted in front of me, ready for my perusal.

After that, the gentler sounds of 'Moon Safari' were a doddle to reproduce, creating a sonic space that was full of floaty, wispy noises and effects accompanying the vocals. 'Sexy Boy' was driven along by the opening bass sounds, time being kept exactly by the high hats ticking away, and the vocals weaving in and out of the mix of Moog, Syrinx and Korg synthesizers. I just sat back a floated away with it.

Open mounting lugs are tapped, so nuts are unnecessary and fixing easy.  

**MEASURED PERFORMANCE**

<table>
<thead>
<tr>
<th>Trackability (300Hz)</th>
<th>Weight</th>
<th>Vertical tracking angle</th>
<th>Output (5cm/sec rms)</th>
<th>Frequency response</th>
<th>Distortion (45µm)</th>
<th>Channel separation</th>
<th>Tracking force</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>63µm</td>
<td>1.4gms</td>
<td>25 degrees</td>
<td>0.58mV</td>
<td>20Hz - 20kHz</td>
<td>1.1%</td>
<td>30dB</td>
<td>1.4gms</td>
<td>gms</td>
</tr>
<tr>
<td>45µm</td>
<td>63µm</td>
<td>Vertical</td>
<td></td>
<td>45µm</td>
<td>1.1%</td>
<td>30dB</td>
<td>1.4gms</td>
<td>gms</td>
</tr>
<tr>
<td>15cma/sec</td>
<td>lateral</td>
<td>Tracking ability (300Hz)</td>
<td></td>
<td>lateral</td>
<td>6.5%</td>
<td>30dB</td>
<td>1.4gms</td>
<td>gms</td>
</tr>
<tr>
<td>1.4gms</td>
<td>lateral</td>
<td>Frequency response</td>
<td></td>
<td>lateral</td>
<td>6.5%</td>
<td>30dB</td>
<td>1.4gms</td>
<td>gms</td>
</tr>
<tr>
<td>30dB</td>
<td>lateral</td>
<td>Output (5cma/sec rms)</td>
<td></td>
<td>Output (5cma/sec rms)</td>
<td>0.58mV</td>
<td>30dB</td>
<td>1.4gms</td>
<td>gms</td>
</tr>
</tbody>
</table>

**FREQUENCY RESPONSE**

- Green - outer grooves
- Red - inner grooves

---

**GROUP TEST**

**VAN DEN HUL DDT-II SPECIAL £995.00**

For - rich and full bodied tonality.
Against - nothing apart from price.

---

**VAN DEN HUL DDT-LL SPECIAL £995.00**

Definitive Audio

+44 (0)115 973 3666

www.definitiveaudio.co.uk

**VERDICT**

Long established cartridge from Holland with open and dynamic sound.
85 years of audio innovation

Kingdom Royal is Tannoy's flagship loudspeaker. It represents the sum of the British company's rich 85 year heritage, its cutting-edge technical innovation and world-renowned acoustic engineering. Kingdom Royal brings together proprietary components, a radical cabinet design and the finest quality materials throughout, to deliver a true musical reference.

Distilling this high-end expertise throughout our loudspeaker range, everyone can enjoy Tannoy's class leading refinement and performance. From the award-winning Mercury V series to the classic Prestige collection, every Tannoy loudspeaker has Kingdom Royal DNA at its heart.

For more information on Tannoy's extensive loudspeaker range visit www.tannoy.com
Now for the difficult bit. Even though we all try to keep a dispassionate view on the equipment that we review, personal preferences will always come into play at some point in making a value judgement on something as personal as sound. A perfect example is the different views that fellow scribe Adam Smith and I have on Audio Technica cartridges. He is a fan, whereas, as I said earlier I find them a bit too forward for my taste. Hopefully if you read this magazine regularly you will have begun to find where your taste and each of ours crosses over. So my chosen order of merit here may not be that of other writers and I would hope you can interpret my findings and relate them to your own preferences.

In sixth place I'm putting the Goldring Legacy. I liked certain aspects of its sound; the richness to the bass and its strong imaging, however, the rather insipid quality to the treble was a disappointment, and this combined with the potential phonostage matching problems of the low output, relegate it to this spot.

Next up was the Ortofon Rondo Blue. Electronically it was fine, but it seemed to be only happy when playing classical music. It was OK on older styles of jazz but seemed unable to cope with any sounds that were less than polite. If you only play chamber music, or simple acoustic guitar driven folk music, then this will suit you well. If you play anything else then I think it will disappoint.

In fourth place I put the Audio Technica AT-OC9 MLIII (I can hear Adam's shouts of disagreement as I write this). For me the sound, although moderated from previous examples, still focussed too much on the upper mid and high frequencies, and although bass output is improved it still wasn't strong enough to produce a tonal balance that I felt was accurate.

Now, in third place on the podium I have put the Denon DL304. Despite the fairly serious drawback of the low output and consequent matching and hiss problems, I felt that the sound had an even and fairly neutral balance. It also seemed to play all of the musical genres that I tried, and displayed a wealth of mid-band detail that was enticing to listen to.

Second place goes to the Benz Micro Ace SL. A year on from my original review, I find that it blends the good points of the definition of the OC9 with the bass colour and texture of the Goldring, making for a very well balanced performer that I feel is more than worthy of our Globe Award.

So in first place is the Van Den Hul DDT-II Special. Although quite a bit more expensive than the rest of the contenders here, we put the Van Den Hul into this review as a long established model, to see if the performance of the more affordable designs had caught up with it over the years. In some ways I think they have. The performance gap between a £500 and a £1000 cartridge ten years ago seemed a lot wider than it is now, the cheaper ones generally being more couth in their behaviour. However, there is still a performance gap that has yet to be bridged, and as such the DDT-II Special offers excellent sound that will, I think, satisfy most listeners.

So there we have it. As always, I would recommend that you go and audition as many different options as possible before parting with your money even if, with cartridges, this is difficult, as you tell us.

Using a Moving Coil Cartridge
Moving Coil cartridges (over £500) are a step up in sound quality over less expensive Moving Magnet types (under £500). They give a more open and spacious sound stage, with firmer images and often cleaner bass.

There are drawbacks other than price. Most have very low output, around one-tenth that of an MM, meaning a special preamplifier is needed, typically costing £200-£2000.

The stylus assemblies are necessarily delicate, sophisticated and not user replaceable. Manufacturers commonly offer replacement schemes through their dealers for damaged cartridges. Check on these costs before purchasing.

Emile Allure (above), a high-end valve phono stage with a lovely sound, cost £2500. At the other end of the price scale, is the Cambridge Audio 640P for £80, or the newer 651P (right) for a little more. All these phono preamps are purpose for Moving Coil cartridges.
Audioquest Carbon Firewire cable "showed a greater grasp of the orchestral scenery" said Rafael.

Mini Power

Now you can tune up your Mac Mini to sound better. Noel Keywood explains, and Rafael Todes listens to Item Audio’s go faster mods in their AP Edition.

People buy a Mac Mini and use it to feed an expensive DAC”, says Mark Welsh of Item Audio, "not realising the Mac isn’t optimised for this role. It is a computer, not a music player”. So Item have come up with a Mini tune up, called the Mac Mini AP Edition, price £450.

No you don’t get a Mac for that! You supply the Mac (or they get it for you) at £699 (4GB memory version). The upgrade list is long but most important, because it physically affects the machine, is the removal of its internal switch mode power supply. Yes, it is hauled out completely! The Mini needs a stable 12V and it is supplied from an external power supply and this is possible, we were told.

Another point to note is that the hard disc drive is removed and a solid-state drive (SSD) installed. For the price you get a 32GB drive and that, these days, isn’t going to hold much more than the OS. Item recommend work files are stored on an external drive, but you can pay more for a bigger SSD if you wish. A 256GB SSD adds an extra £264.

The Audirvana Plus music player is installed, as a replacement for iTunes. Some services are turned off, including indexing and Spotlight that constantly access the OS. All wireless network clutter is removed, so internet connection has to be made via wired ethernet – but this is a good idea in any case as you get better speed, security and reliability.

As standard you get “an external linear 12V” power supply, meaning it has a normal heavy transformer inside, rather than a switch-mode arrangement that chops the mains up then feeds it through a small high voltage / frequency transformer.

Alternatively, there are two Kingrex power supply options, costing £1144 or £180 (excluding VAT) or a Paul Hynes Bespoke supply, costing an extra £499 (including VAT). We got the latter, connected through a short, solid silver power cable. Rafael said he would have preferred a longer cable to separate computer from power supply and this is possible, we were told.

The Operating System is OS-X 10.7, or Lion – the latest. Although Snow Leopard is still thought of as less troublesome in certain areas it isn’t wise to try and downgrade it I was told (I run Snow Leopard from an external Firewire drive with no problem with a Lion Mini, so there are ways to do this).

The Audirvana Plus music player is installed, as a replacement for iTunes. Some services are turned off, including indexing and Spotlight that constantly access the OS. All wireless network clutter is removed, so internet connection has to be made via wired ethernet – but this is a good idea in any case as you get better speed, security and reliability. The optical CD/DVD drive of earlier Minis is removed and the miniature cooling fan too. As a result the Mini falls totally silent, not that they make much noise in any case. That is what you get for £450, but Item Audio can apply various other mods as requested.

We bought a new Mac Mini as a comparison for this review, the 4GB version with a hard drive and a fully
updated Lion. The modded AP Edition machine in effect cost £450 plus £499, or £949 more than this unit. Item note that the Mini boots faster and is quieter than the standard machine, and it runs a little warm too.

SOUND QUALITY
To listen to this product (Rafael says) I connected the Item Audio-tweaked Mac to my Weiss DAC202 using various FireWire leads, supplied by Audioquest. I tried the entry level Forest at £22.50 which seemed a bit basic in terms of soundstage presentation. Moving to the next one up in the range seemed to produce a leap in sophistication; the Carbon at around £85 showed a greater grasp of the orchestral scenery, and produced that illusive quality you find in good digital reproduction of the air and space between instruments.

Finally, using the most expensive cable in the range, the Diamond further intensified the three dimensional space, and the orchestra seemed suddenly to add 20 metres of depth front to back. I did most of my listening with this most curious of cables, which includes a battery pack and is said to minimise insulation-based timing error.

I used the Audirvana Plus player to access the digital files, finding significant improvements over particularly the native iTunes player, as well as Decibel.

The first thing that struck me when using the Item Mac Mini, was that it was completely silent due to its solid-state memory, so much so that I wasn't sure if it was on or off! As a baseline comparison, I took a plain Mac Mini without any improvements, and loaded it with Audirvana. Using the same FireWire cable, I listened to the HD Tracks sampler, Rimsky Korsokoff's "Dance of the Tumblers".

Being a bit of a Mac virgin, it was really fascinating to see how the family of sounds differ between PC and Mac. I use both a basic Toshiba laptop running Windows XP, and Windows 7 as well. The basic Mac Mini seems to produce a very different family of sound. It's quite a rich, fruity, sound, with plenty of bluster, but lacking the more clinical precision I tend to hear on my Windows efforts. The treble in particular is smoother, even a bit rolled-off, the bass is not as tight as my Windows laptop, there is less grip and control, it joins in too enthusiastically.

Spatially, the basic Windows laptop is better, having a much more accurate sense of where things are. If you haven't heard really good digital reproduction, you won't miss it, but if you have, the lack of spatial detail is a bit disappointing. The Mac Mini could be classified as more pleasing to listen to, but lacks the resolution of a Windows machine, which although can be brighter at the top frequencies, presents more detail and information.

So how does the Item Audio Mac fare? Listening to the Rimsky Korsokov "Dance of the Tumblers", reveals a better sense of control of the sound. The sound is "cleaner", it seems to be emerging from a blacker background. There is a touch more of a feeling of an orchestra stretching backwards. The bass is faster and more accurate - there is less "smear". In the final chords of the work, the orchestral crashes seem to have a clearly defined start and stop to them, which is not the case with the vanilla model. The Item Mac Mini still retains the same family of sound as the basic Mac, it is clearly related to the Mac sound, with it's mellow, sweet rendition of tracks played.

Whilst there is more detail emerging from the digits, and to be sure this is Mac Mini done well, the choice between the Mac and Windows sound will be down to personal taste. How does this compare to the Aurender Server I reviewed a few months ago?

Whilst the improved detail is significant, I enjoyed the extra control and resolution the Aurender brought to the mix, although a tad bright at the top in my system, it had superb space and timing.

Interestingly, when I removed the video display from the Mac Mini, there was suddenly a jump in the overall tightness of the presentation; this is not surprising as the processor's workload just decreased drastically. The holographic picture of the orchestra moved much closer to the Aurender presentation. It is however not really a sustainable way to listen to music!

For me this exercise has highlighted the difference between the audio qualities of Macs and PCs, the importance and potential of a good FireWire cable, and that there is plenty that can be done to bring a Mac to a higher level of performance. The Item Audio AP Edition is an audible improvement for those with Macs I found.

The modded Mini (top) has a power cord that plugs into the external Paul Hynes Bespoke supply.

The Audioquest Diamond cable comes with a 72V dielectric charging power supply, no less!

The Audioquest Forest cable was a bit basic in presentation, but it is inexpensive.
MC-5S Home theatre 5 channels power Amplifier
A new and unique product to the UK
Output power 70 watts per channel
Valves Special KT90 x10, ECC83 x 5 and ECC82 x 5

Stunning new MD-7SE pre-amplifier
Valves 6SN7(special) x 4 and 2746 x1(Rectifier valve)

Fabulous MC368-BSE integrated amplifier
Output power switchable. 75 watts - Ultralinear mode and 40 watts - Triode mode
Valves Special KT90 x 4 6SN7(special) x 2 and 12AX7 x 2

The Mei Xing Electronics Factory was built in 1991 and specializes in valve audio amplifiers. We have our own CNC machining center with numerically controlled lathes and a professional technical team with many years of experience. Our products have won many prizes, including CHINA FAMOUS BRAND, INTERNATIONALLY FAMOUS BRAND and are of course fully CE, CCC and ROHS certified. Our products are very popular amongst our customers and are now being sold to more than 40 countries. We produce OEM for more than 10 international brands in Europe and in Asia.

If you are really serious about the music on your hard drive, this is the USB cable for you
Advanced specification delivers high end analogue quality sound for the audiophile of the digital generation
At last, a USB cable that can match the specification and sound quality of some of the best analogue cables
99.999% (5N) pure silver
100% screened
Rhodium over silver plated connectors

Would you like a copy of our FREE SPECIFICATION SHEET for more information on this very advanced cable?
Call 01332 342233 or Email to: sales@blackrhodium.co.uk
To request your FREE SPECIFICATION SHEET
Trickle Down Grado?

At less than half the price tag of the PS1000, the Grado PS500 Professional Series headphones promise much. Paul Rigby finds out if they deliver.

Weighing in at 320g, the new Grado PS500 is has ear 'cups' that freely rotate on single metal poles that either sit, unevenly, uncomfortably and rather awkwardly, upon the ear, pressing the upper portion of the ear and leaving the lower part almost untouched, or they enclose the ear but then trigger excessive headband pressure.

These dynamic, open-backed 'phones feature a leather-wrapped flat spring steel head band of 35mm at its widest that, after donning a pair, make you look like you're about to pilot a Huey helicopter on an insertion mission during the Vietnam War. The headphone cable is thick, flexible and spans around 1.75m long, finished with a full-size 6.3mm plug.

SOUND QUALITY

I decided to utilise my reference Sennheiser HD650 as an aural comparator and a Musical Fidelity X-Can BVP headphone amp. The HD650 may be priced at 'just' £340 but it does punch way above its weight, snapping at the heels of the Grado.

After several days run-in and spinning the Sugababes' overly compressed 'Freak Like Me', the Grado retained the thumping lower frequencies exhibited by the Sennheisers, although the Grado managed to produce a more finely chiselled suite of bass tones that had greater character and an enhanced, direct punch.

Moving to vinyl and Frank Zappa's 'Peaches En Regalia' from the Classic Records edition of 'Hot Rats'. It's slightly forward upper mids were tempered by vinyl's natural warmth which helped to balance the overall presentation. Within the track, the Grados leapt upon the complex arrangement with glee, teasing and focusing the ear on each instrument. This was a facet that the HD650s just couldn't match. Presented within a broad sound stage, this new sense of clarity and dynamic purpose produced a livelier performance than the Sennheisers, which were rather muted and languorous by comparison.

Turning to jazz and Louis Armstrong's 'Bucket Got A Hole In It' from Pure Pleasure's 'The Great Chicago Concert' box set, the Grados coaxed a solid double bass which added a fixed focal point, around which danced Edmond Hall's suitably reedy clarinet and a raucously vibrant trombone from Trummy Young with a cleaner, yet slightly tremulous Armstrong trumpet. On Perdido, Billy Kyle's piano successfully portrayed the multi-timbral nature of the instrument, infusing it with life and delicacy.

CONCLUSION

Despite the architectural problems, the Grado PS500 headphones offer a big, bold sound. Bass supplies an untrammeled wallop that provides drive and substance to any track. The headphones do sometimes run away with themselves, losing control in the upper mids on occasion that can lead to slightly clamorous upper frequencies but that's more than recompensed by the often exquisite extraction of fine detail, especially when faced with an analogue source.

VERDICT

Offering a lively presentation, full of low frequency kick and upper frequency detail, the PS500s provide bags of entertainment.

GRADO PS500

FOR

- characterful bass
- intimate soundstage
- transparency

AGAINST

- slight midband lift
- design fit
- source critical
MAIL

Visit our website at www.hi-fiworld.co.uk or send your emails to letters@hi-fiworld.co.uk. Letter of the month wins a pair of KEF Q100 loudspeakers.

LETTERTHEMONTHPRIZE

KEFQ100LOUDSPEAKERS

For more advice see Letters from earlier issues at www.hi-fiworld.co.uk/letters

A pair of KEF Q100 loudspeakers are on their way to DR. JEREMY HONEYBUN, Letter of the Month winner in our April 2012 issue.

**Letter of the Month**

**HOT NAIM**

Isn't it wonderful when you try something new in our wonderful world of hi-fi and it simply takes your breath away? Admittedly, for those of us unable to afford stratospheric price tags it might not happen all that often but my recent experience has taught me that a little experimentation can sometimes go a long way.

To summarise: I have always been a transistor amp user, having grown up during the 1970s and, frankly, never having heard anything different. After a series of various sideways moves through Marantz and NAD products I finally gravitated to a NaimUniti two years ago and subsequently added a NAP 200 power amplifier some six months ago.

Sublime sound — or so I thought until shortly before Christmas when a friend popped round with his new Icon Audio preamp and we hooked it up to my system. What a revelation! I still had the grunt and propulsion of the NAP 200 but now allied to a much more fluid and rounded presentation. It really was like listening to a whole new system. So much so I was kicking myself for not having tried the trick before.

I know Noel has often championed using valve preamps with Naim gear but, frankly, I didn’t take much notice as I was quite happy with what I had (sorry Noel!). But this made me realise how much more performance can be wrung out of some systems with just a bit of lateral thinking. I’m now eagerly awaiting delivery of an Icon Audio LA4 Mk II in the near future. It’ll probably be the best upgrade I have ever made and I’d recommend any other Naim owners to try the combination. Many thanks for a fantastic magazine. Keep up the good work.

Jon Myles

London

CHEAP AUDIO STREAMER

I have been looking into the idea of creating a connection for audio streaming to my main system which is in a music room on its own. I can already stream music to the main living room which has an AV set up, using my Sony Blu-ray player. However for the main music room I want to be able to stream hi-res files and then put all of my current CD collection (5000+) as Flac files. However, as with most people in the current climate, cash has become very tight so I am having to look at this on a budget. Problem is, while I have seen the obvious choice which is the Squeezebox Touch, I was just wondering if there is any alternative that might offer me a saving and some greater flexibility.

In the way I will be using this it will be into a single room only and use digital out straight to my current Perpetual Technologies P.A.I and P.A3. So the quality of the internal chips is not vital, just so long as the unit offers a good digital out. The touch has a pretty screen but to be honest you cannot see it from across the room so you would need to keep getting up to sort and make choices of what to play.

My idea is to look for a good but cheap plain black box media streamer with digital out and native Flac support and then use a cheap Android Tablet.

Put a good valve preamp in front of a Naim power amplifier like the NAP200 and you end up with a great hybrid amplifier. That’s what Jon Myles did.
with an App, as a very nice remote control with a screen to view my choices from my listening seat. Connection to the streamer would be via a Netgear Powerline Ethernet plug wired directly which should provide the unit with good consistent speed. Is what I am suggesting sensible? Possible?

If so, which of the current cheap media streamers would you advise I look at? I have not seen anyone really checking them out for sound quality. The one advantage of this route over the Squeezebox is that when money becomes available I can change the media streamer for a better sounding model and keep the tablet as the remote using the same App, or one specifically for the media player.

Any suggestions for what to look at or even links to places that have reviewed any models would be a big help.

Regards
Andrew McBride

Hi Andrew.The Logitech Squeezebox Touch is as cheap as it gets, or alternatively a Sonos Connect will do the job. An Orb MP1 is cheaper than both but you will have to find one in the UK or buy from the States. NK

Rear view of the Sonos Connect network player shows digital outputs for a hi-fi, or DAC, network inputs and analogue audio in and outputs. All this for around £300 — and it can be controlled by a smartphone.

PHONO FUNK

This letter is something of a follow up to my letter in the June 2011 issue. To cut a long story short, a trip to Icon Audio near Leicester resulted in the purchase of their Stereo 40 Mk I 11 with KT88 valves. My first valve amp I should odd — and I love it. I prefer it in Ultra Linear mode.

I heard the Icon Audio PS1 when I auditioned several of their amps, and liked that. But would the combination of valve amp and valve phono stage be too smooth sounding over time? Would the Ant Kora prove a better match?

Finally, speakers. I feel the Castle Pembroke can overwhelm the room at times and are perhaps not the best speaker for my tastes, although they really shine with acoustic music. I think a small, good quality standmounter may be the way to go.

I really need some good advice and pointers as I won’t have this sort of money available again and don’t want to waste it.

Kind regards
Steve Chapman

Hi Steve. The Castle Knight 2 loudspeakers work well in a small room. They are designed to go against a wall and have very solid and clean bass. They are on the bright side and need a lot of running in, but may well suit — and at £400 give you a lot to splash out on other items.

The Benz Micro Ace feeding an Icon Audio PS1 is a classy combo and worth considering. I ran a PS3 through a WAD 300B triode amplifier and do not find the combo too warm, but this is a matter of taste — and loudspeaker.

I believe the Ant Kora 3T is no longer available and I am reluctant to recommend silicon chip phono stages for a good moving coil cartridge. The low output of an MC is best exploited by a transformer; this is the only elegant way of turning current into voltage, as it were — and input transformers are almost always found in tube phono stages. NK

OLD MARANTZ GOLD

I have written to you a couple of times before and have absorbed the advice — and being impatient ignored it! I’m sorry, one of the questions was related to a replacement for my B&W DM602S3s, in which I liked them but found the overall balance cool even using a valve amp. You kindly recommended a pair of My Audio MY1923s but I knew I would have to wait a while before I could purchase them.

So I trawled the internet (ebay) and found a pair of Marantz DS900 loudspeakers for sale on castored stands. They looked immaculate, with beautiful veneered woodwork and so I ventured to Chesterfield to audition them with an old Technics SLP 333 CD player. I was pleasantly surprised and purchased them and immediately drove to Wilmslow Audio near Leicester where they modified the old clip terminals for me.

When I got them home I went through a period of “have I done the right thing?” and considering their age decided to again visit Wilmslow Audio and ask them to replace the ageing crossovers with modern components.

Well you could have blown me over with a feather. They are now simply staggering, besides being beautiful.
Marantz DS900 loudspeakers from yesteryear made Nigel Masters happy after he had the crossover upgraded.

Guess what, I am almost at the end of my quest for beautiful sound reproduction. It seemed never ending. Another Fidelity Audio power supply is needed for the Project Phono Box SE (Mk I version) and an upgrade on the cartridge. I have recently become interested in jazz which is I find a natural follow on to classical music. So there is life left in old equipment clean it, update if needed and cherish it.

Perhaps an article might be possible from you about the DS900s which were also produced in a slightly reduced wooden cabinet, known as the HD series? Could you tell me who made the drive units and are they still available today? Thank you for your forbearance, yours is an excellent magazine and whilst I think about it, thanks to my wife for her continued support and understanding over my wonderful hobby!

Regards
Nigel Masters.

They are a nice pair of oldies. Unfortunately, we have no info on them, nor any experience. The drive units are almost certainly of Japanese origin and I do not recall seeing anything like them in modern component catalogues. I suggest you ask Wilmislow, as they have a broad knowledge of drive unit suppliers.

NK

META MATTER

Thank you for publishing my last note — and in the 'Letter of the Month' slot too! Having bored for Britain on metadata I should mention that I'm not a total bit-head (careful how you read that), I too have a cherished vinyl collection — but imagine racking them all in identical, plain sleeves! That's what missing metadata does.

Which is not to detract from DP's point. Assuming they aren't in plain wrappers you can survey thousands of albums at a glance. Subtle cues of location, colour, even the scruffiness of old friends' covers lead you to what you want faster than any database search. They can even make new links — "Ah yes, haven't played that one in a while ... why not?" That's where the human brain leaves music software coughing in the dust.

One way to harness our capacity might be to present stored music as a stack of LPs/CDs viewed edge-on — spines rather than full covers. That visual metaphor would echo what we see looking at our physical music collections and make best use of limited screen space. The iTunes 'cover flow' view is a step in that direction but, for me, doesn't quite hack it. So, do any hot-shot app developers out there want to give it a go?

Regards,
Derek Nudd
Portsmouth
letters On-Line!

You can now read our Letters on-line, from the last issue back to March 2010. That’s a treasure trove of information and advice to our readers, as well as a fascinating catalogue of reader’s systems and views. There’s mountains of buying information, all just a click away on your computer or i-Pad. Have fun!

You can reply to Letters using the e-mail link at the top of the page -

**World Mail** June 2011 issue

Write to us: E-mail: [letters@hi-fiworld.co.uk](mailto:letters@hi-fiworld.co.uk)

Letters are published first in the magazine, then here in our web archive. We cannot guarantee to answer all mail, but we do manage most comment in the Comment section at the bottom of each page.

Your experts are -

DP David Price, editor; HK Noel Kaywood, publisher; PR Paul Rigby, reviewer; TB Tony Bolton, reviewer; RT Rafael Todes, reviewer (Alhgett String Quartet); AS Adam Smith, reviewer; DC Dave Cowley; Sound Hi-Fi, World Design, etc.

...or the reply pane at the bottom of the page. Replies will go on-line and in the magazine if suitable.

Just go to [www.hi-fiworld.co.uk](http://www.hi-fiworld.co.uk) and click on Letters in the left hand menu list, under the FEATURES category. This will take you to the individual months of issue. To see the full list set the ‘Display’ drop-down list to ‘All’.
TREACLE TREAT
Thought I might pass on this tip! discovery I made today: it may be of interest to other readers!

I was recently given an old Rega Planar 2 by a very good friend of mine as a first foray into vinyl. Unfortunately, the deck had been quite neglected, a drive belt of knotted string, a goodly layer of dust and detritus, and was in desperate need of some timely TLC! Fortunately, I’m a bit of a strip-down, clean and re-assembly kind of guy, and got stuck right in!

The glass platter is now spotless, the plinth shiny black, the RB250 arm cleaned and modded with a Rega stainless steel stub and counterweight to replace the nasty plastic one, a new drive belt installed along with a nice clean and fresh felt mat – so for so good!

During all this cleaning and replacing of components, I discovered the arm lift was not working as intended. I removed the arm from the plinth and took the arm lift apart, cleaned the old gunk out and re-greased, only to discover there was now greased, only to discover there was now got stuck right in!

As a first foray into vinyl, I was very pleased to Hi-Fi World for having the guts to undertake this type of review – brilliant stuff!!

I have over the past five years had huge upgrades that are tangible, real and clear leaps forward via the route of component upgrades. First was a re-clocking and power supply upgrade (Trichord Clock 4 and Never connected power supply) to an ageing TEAC T1 transport. This was brilliant and up until the laser gave up late last year was my regular front end. At the time this was feeding a Musical Fidelity Tri-Vista 2 DAC, that I thought was wonderful ... until JS Audio got hold of it and as with the TEAC took it to an altogether different level through upgrades. When I got the Tri-Vista back I really saw what it was capable of.

The demise of the Teac had me searching for a replacement. I called some contacts that I had known for many years and via CPT acoustics came across a Cambridge Azur 840C CD player. A bit of brand snobbery crept in and I said that I was looking more towards Naim, second hand Wadia etc. Colin at CPT acoustics laughed and explained that it was a massively upgraded Cambridge and not a ‘stock’ player.

A visit to CPT with a handful of discs soon had me blown away ... it was simply stunning! But Colin advised me to take it away and demo it against other machines before I make any decision. So that’s what I did... and he was right, it really is something very special. I compared it at various dealers to some Naim players including a CDX2 (honestly!), the Audiolab 8200 (not a prayer in getting remotely close), a 1500 Micromega, Cyrus CDX2 transport and DAC ... good but not good enough, and more that I can’t remember. The funniest thing happened at a reputable dealer who said to myself and the wife towards the end of the dems “I have an Esoteric for £9k that may do the trick... I’m sure you’d like it”... we declined his suggestion although I was tempted but didn’t fancy the divorce!!!

So the upgraded Cambridge 840C was purchased for a ridiculous price that was well below £1000 and not far north of £5000! And the sound, well to be honest it is staggering: the detail is brilliant, soundstage nailed, space and air around instruments nailed, top-end smooth but highly detailed, bass tight as a drum and deep enough with no boom or overhang.

So reading the review was really relevant and totally mirrored my own experiences. I really would suggest Hi-Fi owners consider this route. There is a risk involved in so much as it’s hard to return a product if you don’t like it after it’s been messed with. But choose a reputable company such as Fidelity Audio as featured in Hi-Fi World, CPT...
Acoustics or JS Audio (from personal experience) who could work with you in achieving the type of sound that you are searching for and can explain what potential lies within your current equipment.

As a side issue the TriVista has been moved on as the Cambridge going through it didn’t work, it simply sounded better as a standalone player. I have also dropped on a pair of ATM SCM40 loudspeakers to replace my brilliant and trusty Linn Kabers that have given 10 years sterling service.

Dave Mayer

NEW SMOOTHIE
I would like some advice. I’m thinking of changing my CD and amp. I would like something very smooth sounding for a budget of £600 for the pair. I recently upgraded my speakers so I want something to do them justice.

Many thanks,
Chris Close,
Lincoln

The smoothest sound you will get for that price comes from NAD in the form of their 326BEE amplifier. An alternative is an Onkyo like the A9377. Both NAD and Onkyo produce good quality amplifiers having a smooth sound and good bass. I think it best if you then choose a matching CD player.

Yours sincerely,
Leo Beirne

Hi Leo,
You will find a review of the rare Armstrong 602 loudspeaker at http://www.audiomisc.co.uk/Armstrong/600/600page3.html on the internet. They look well designed, but you will find modern drive units give a cleaner sound. I suspect you will like loudspeakers from Q Acoustics 2050i floorstanders as they give a smooth and even sound balance much like the Armstrong 602s, and they don’t have tingly metal cones.

I strongly recommend you get an Ortofon 2M Black, at £400, if you want a top Moving Magnet cartridge. There’s little to match it.

For a smooth sounding budget amplifier try a NAD 326BEE we suggest.

Hugh Barnes
Eden Hills.

The Fidelity Audio upgraded Cambridge CD player was a brilliant review says Dave Mayer. Turbo charging hi-fi gives "upgrades that are tangible, real and clear leaps forward" he says.

As a side issue the TriVista has been moved on as the Cambridge going through it didn’t work, it simply sounded better as a standalone player. I have also dropped on a pair of ATM SCM40 loudspeakers to replace my brilliant and trusty Linn Kabers that have given 10 years sterling service.

Dave Mayer

NEW SMOOTHIE
I would like some advice. I’m thinking of changing my CD and amp. I would like something very smooth sounding for a budget of £600 for the pair. I recently upgraded my speakers so I want something to do them justice.

Many thanks,
Chris Close,
Lincoln

The smoothest sound you will get for that price comes from NAD in the form of their 326BEE amplifier. An alternative is an Onkyo like the A9377. Both NAD and Onkyo produce good quality amplifiers having a smooth sound and good bass. I think it best if you then choose a matching CD player.

Yours sincerely,
Leo Beirne

Hi Leo,
You will find a review of the rare Armstrong 602 loudspeaker at http://www.audiomisc.co.uk/Armstrong/600/600page3.html on the internet. They look well designed, but you will find modern drive units give a cleaner sound. I suspect you will like loudspeakers from Q Acoustics 2050i floorstanders as they give a smooth and even sound balance much like the Armstrong 602s, and they don’t have tingly metal cones.

I strongly recommend you get an Ortofon 2M Black, at £400, if you want a top Moving Magnet cartridge. There’s little to match it.

For a smooth sounding budget amplifier try a NAD 326BEE we suggest.

MOVING FORWARDS
I have recently re-visited my hi-fi since first assembled circa 1982, comprising, Thorens TD 1608 Mk II with SME Mk II modified and damped arm, Sansui AU 317/11 amplifier and a pair of Armstrong 602 speakers, all in good working order. Now, I want to plan an upgrade.

To start the process, I’d be very appreciative if you could direct me to where I can obtain a review of the speakers; and what would your suggestions be for replacement speakers.

Your views would also be greatly appreciated as to what would be economical alternative replacements for the remaining items. The only refurbishments I have undertaken have been the re-wiring of the arm, also speaker cross-overs, with noticeable improvement in depth, detail and stereo image.

With a view to replacing the cartridge from AR Cambridge C77 to one from the Clear Audio range - e.g., Arum Beta S. I welcome your thoughts.

Yours sincerely,
Leo Beirne

Hi Leo,
You will find a review of the rare Armstrong 602 loudspeaker at http://www.audiomisc.co.uk/Armstrong/600/600page3.html on the internet. They look well designed, but you will find modern drive units give a cleaner sound. I suspect you will like loudspeakers from Q Acoustics 2050i floorstanders as they give a smooth and even sound balance much like the Armstrong 602s, and they don’t have tingly metal cones.

I strongly recommend you get an Ortofon 2M Black, at £400, if you want a top Moving Magnet cartridge. There’s little to match it.

For a smooth sounding budget amplifier try a NAD 326BEE we suggest.

Hugh Barnes
Eden Hills.

The Fidelity Audio upgraded Cambridge CD player was a brilliant review says Dave Mayer. Turbo charging hi-fi gives "upgrades that are tangible, real and clear leaps forward" he says.
Hi Hugh. And greetings to all those down under. If you look at my Wigwam Show report 2012 you will see inevitable Tannoy Lancasters, Corner Horns and what have you that are a feature of the UK vintage, enthusiastic scene. People buy 'em and restore 'em. These are sensitive, give big bass and forward project vocals. Perhaps you can find a pair in Oz, unmolested by the local Wombat. Tannoy horns seem to be what you need — they are sensitive and move the room with bass, but I'm not sure so many will have found their way to your part of the world. The Japanese market may well have them available second hand, but although Tokyo is closer than Glasgow, it still is a way if you are going to ship. Sea freight isn't so expensive though; you've just got learn how to read Japanese e-bay! Don't forget Hong Kong and Singapore too, as both have a healthy hi-fi market from which you may be able to ship at reasonable rates.

You do not have to stick to 300Bs. They are expensive and other valves can give great results. The 2A3 sounds very sweet, although it is power limited. The big, chunky 6C33C, comprising two triodes strapped in parallel, delivers a lovely sound in my experience and it is cheap. Even the EL34 can sound nice in the right circuit — very light and detailed — and then there is the 6550 and KT88, my preference being for the latter. You might be able to pick up a pair of old Quad[s of some sort, or perhaps Quad II-forty.[s. Then there are the EAR amplifiers, and as you mention the great Icon Audio range. For a decent budget CD player think Marantz like a CD63 Ki Signature of a version of it.

iTunes on a Mac will rip a CD into the computer and it will burn it back out from a Playlist too, so you should have no problems here. You will need to check this of course as you may not have a CD/DVD burner installed, depending upon the Mac you have. Current Quads don't even have an optical drive but they will still rip in and burn out through an external drive, at least with Lion and Snow Leopard. I believe Leopard will do it too.

**GIVE ME PUNCH**

My hi-fi system still does a fine job but having heard a friend's set up I feel I could beef things up a bit, possibly by getting some new speakers, but I'd like your opinion if that's where best to spend the cash.

My system is Linn Sondek/ Meridian 506 CD player/ Sugden a21A amp/ Mission 752 Freedom speakers. I'm not sure what CD player or amp my friend has, but I'd like your opinion if that's where best to spend the cash.

My hi-fi system still does a fine job but having heard a friend's set up I feel I could beef things up a bit, possibly by getting some new speakers, but I'd like your opinion if that's where best to spend the cash.

My system is Linn Sondek/ Meridian 506 CD player/ Sugden a21A amp/ Mission 752 Freedom speakers. I'm not sure what CD player or amp my friend has, but I'd like your opinion if that's where best to spend the cash.

My hi-fi system still does a fine job but having heard a friend's set up I feel I could beef things up a bit, possibly by getting some new speakers, but I'd like your opinion if that's where best to spend the cash.

My system is Linn Sondek/ Meridian 506 CD player/ Sugden a21A amp/ Mission 752 Freedom speakers. I'm not sure what CD player or amp my friend has, but I'd like your opinion if that's where best to spend the cash.

My hi-fi system still does a fine job but having heard a friend's set up I feel I could beef things up a bit, possibly by getting some new speakers, but I'd like your opinion if that's where best to spend the cash.

My system is Linn Sondek/ Meridian 506 CD player/ Sugden a21A amp/ Mission 752 Freedom speakers. I'm not sure what CD player or amp my friend has, but I'd like your opinion if that's where best to spend the cash.

**EXCITING CD**

After a long lay-off from buying magazines I restarted buying Hi-Fi World in 2008 (just for the knitting patterns you understand). I have had valve amps for a number of years and just recently I became the proud owner of a pair of Bill Beard's P100 monoblocks, together with a P500A pre-amp, thanks to Simon at '2nd hand hi-fi' of Stockton-on-Tees (real nice guy — likes a biscuit or six). I also own a Shanling CD-T80 (valve output) CD player but I would like to change it for something with a bit more excitement and I was wondering if 'you lot' could come up with some suggestions? As I have had to pay for some new valves I would like a recommendation around the £500 mark (don't mind pre-owned). The rest of my system is Linn LP12 / Ittok/ Ortofon MC10 Supreme turntable, and Ruark Crusader II 'speakers. I would like to give an unashamed 'plug' to Simon at 2nd hand hi-fi as a proper, helpful old fashioned hi-fi dealer and a gentle man 'to boot. Hope you can point me in the right direction.

**Alfie Forcer**

Hi Alfie. You want to replace the Shanling CD-T80 with something cheaper? I would have suggested you try replacing the valves, the usual solution to a valve output player that loses its excitement. Even though small signal valves last 10,000 hours, their sound doesn't hold up so well over that period. But you say you have replaced valves. If this was in your P100 monoblock power amplifiers, then try replacing those in the CD-T80. Otherwise, it isn't easy to recommend a £500 player that will give more excitement. A Canor CD2 is a step up and you might be able to get its predecessor, the Edgar CD1, for a good price. Otherwise, consider the Icon Audio CDX1 or even an Eastern Electric player second hand.

**A NEW POSITION**

I have just finished reading the February 2012 issue of your mag. Normally I

**Dave Clarke**

My hi-fi system still does a fine job but having heard a friend's set up I feel I could beef things up a bit, possibly by getting some new speakers, but I'd like your opinion if that's where best to spend the cash.

My system is Linn Sondek/ Meridian 506 CD player/ Sugden a21A amp/ Mission 752 Freedom speakers. I'm not sure what CD player or amp my friend has, but I'd like your opinion if that's where best to spend the cash.

My system is Linn Sondek/ Meridian 506 CD player/ Sugden a21A amp/ Mission 752 Freedom speakers. I'm not sure what CD player or amp my friend has, but I'd like your opinion if that's where best to spend the cash.

My system is Linn Sondek/ Meridian 506 CD player/ Sugden a21A amp/ Mission 752 Freedom speakers. I'm not sure what CD player or amp my friend has, but I'd like your opinion if that's where best to spend the cash.

My system is Linn Sondek/ Meridian 506 CD player/ Sugden a21A amp/ Mission 752 Freedom speakers. I'm not sure what CD player or amp my friend has, but I'd like your opinion if that's where best to spend the cash.

My system is Linn Sondek/ Meridian 506 CD player/ Sugden a21A amp/ Mission 752 Freedom speakers. I'm not sure what CD player or amp my friend has, but I'd like your opinion if that's where best to spend the cash.

**Hi Dave Clarke.**

My hi-fi system still does a fine job but having heard a friend's set up I feel I could beef things up a bit, possibly by getting some new speakers, but I'd like your opinion if that's where best to spend the cash.

My system is Linn Sondek/ Meridian 506 CD player/ Sugden a21A amp/ Mission 752 Freedom speakers. I'm not sure what CD player or amp my friend has, but I'd like your opinion if that's where best to spend the cash.
Before the Canor CD2 came the Edgar CD1 and this is a great player to get if you can find one. Otherwise, save up for a Canor. Both have a valve regulated power supply, and valve output stage and both sound fantastic.

skip over the 'how to turbo charge your Linn' articles as I never bought into the whole Linn/Naim thing in the 80s anyway. Something in this particular item must have caught my eye as I read it through (Tony Bolton does write a good article). Being the owner of an aged but lovely original Gyrodec (updated platter and bearing, QC power supply) the older Gyr had the facility to fit two arms by moving the motor. Why not give it a try I thought. I can always reverse it no harm or foul! So 3 hours later (those motor wires are very fragile and a pig to solder!) I sat down to listen for a difference in sound. Wow! Talk about a smack in the gob! Even with my elderly Gyrodec/Herius Orion Mk I / Ortofon MC2000 set up the sound really tightened up. The soundstage stayed wide and focused but the drums on Lucifer by the Alan Parsons Project snapped out like never before! Everything from 180gram Parsons Grievous Angel to original 1979 Barclay James Harvest went for a spin. Now I'm hooked on vinyl again— the upgrade bug has bitten! So swap the Ortofon for something newer? Or would a dedicated phono amp better the phono stage in my Musical Fidelity VDAC via a pure i20 digital transport. Too much information perhaps?

The question is where do I go now? Detail is present, a snap and drive is present too. I can hear individual instruments - great, but how do I get more full bodied sound, but more importantly where is the music that I remember so fondly from my youth with vinyl?

I had convinced myself that it was analogue reproduction that was missing. All those Os and Is are too stark, too precise for me. Right then save up for a Rakson Radius or pick up a used Technics SL 1210 and modify it. But wait, I have hundreds of CDs but only a couple of dozen Vinyl LPs. That is the aforementioned mistake. My digital path is set. Realistically I need to maximise my digital output in a more musical, warmer (analogue like) way.

Here is the question. How do I upgrade my system without replacing the main Cyrus items? My inclination is to save up for a really good DAC for both CD and iPod. Will a TeddyDAC or Moon 300d give me that warmer musicality I seek and if so which would be better? Or would they be overkill for my setup?

Do I upgrade the CD6 to an 8 or even CDXTSE Transport. Do I upgrade the VDAC through a company such as Fidelity Audio, who you recently highlighted?

My musical preference is Rock and a good, powerful bass is quite important. I know my system isn’t great in this department and needs a boost. I believe the Cyrus PSX-R will broaden the sound and add bass, but I don’t want to add one just yet due to space limitations. Ideally, budget is limited to the cost of the (Simaudio) Moon but £1500 is kind of ceiling for me. I do like the look of the TeddyDac though.

Many thanks,

Ray Bennett,
Lancashire

You will not easily get an analogue like sound even from better DACs, unless you go stratospheric to dCS with their Ringdacs. The best you could do would be to buy a Chord Electronics DAC64 second hand. This has a really warm, smooth sound that shades most else. The reasons is that, apart from being a good DAC, it also has rolled down treble above 16kHz. The subsequent QBD76 wasn’t the same at all. There are few alternatives to this at £1500, although the Canor CD2 may be within your reach and is a superb way to listen to CD.

NK

The superb Chord Electronics DAC64 became renown for its smooth sound. Not now available, it is a great second-hand buy.

CD NOT LP

I need help. You see I think I may have made a mistake and I’m not sure how to remedy it. A compulsive purchase of an ex demo Cyrus 8xp (now upgraded to 8xp+) has led me on a journey to a system of the above mentioned amp, Cyrus CD6se, Proac tablette anniversary speakers and iPod Touch into a musical fidelity VDAC via a pure i20 digital transport. Too much information perhaps?

The question is where do I go now? Detail is present, a snap and drive is present too. I can hear individual instruments - great, but how do I get more full bodied sound, but more importantly where is the music that I remember so fondly from my youth with vinyl?

I had convinced myself that it was analogue reproduction that was missing. All those Os and Is are too stark, too precise for me. Right then save up for a Rakson Radius or pick up a used Technics SL 1210 and modify it. But wait, I have hundreds of CDs but only a couple of dozen Vinyl LPs. That is the aforementioned mistake. My digital path is set. Realistically I need to maximise my digital output in a more musical, warmer (analogue like) way.

Here is the question. How do I upgrade my system without replacing the main Cyrus items? My inclination is to save up for a really good DAC for both CD and iPod. Will a TeddyDAC or Moon 300d give me that warmer musicality I seek and if so which would be better? Or would they be overkill for my setup?

Do I upgrade the CD6 to an 8 or even CDXTSE Transport. Do I upgrade the VDAC through a company such as Fidelity Audio, who you recently highlighted?

My musical preference is Rock and a good, powerful bass is quite important. I know my system isn’t great in this department and needs a boost. I believe the Cyrus PSX-R will broaden the sound and add bass, but I don’t want to add one just yet due to space limitations. Ideally, budget is limited to the cost of the (Simaudio) Moon but £1500 is kind of ceiling for me. I do like the look of the TeddyDac though.

Many thanks,

Ray Bennett,
Lancashire

You will not easily get an analogue like sound even from better DACs, unless you go stratospheric to dCS with their Ringdacs. The best you could do would be to buy a Chord Electronics DAC64 second hand. This has a really warm, smooth sound that shades most else. The reasons is that, apart from being a good DAC, it also has rolled down treble above 16kHz. The subsequent QBD76 wasn’t the same at all. There are few alternatives to this at £1500, although the Canor CD2 may be within your reach and is a superb way to listen to CD.

NK

The superb Chord Electronics DAC64 became renown for its smooth sound. Not now available, it is a great second-hand buy.

CD NOT LP

I need help. You see I think I may have made a mistake and I’m not sure how to remedy it. A compulsive purchase of an ex demo Cyrus 8xp (now upgraded to 8xp+) has led me on a journey to a system of the above mentioned amp, Cyrus CD6se, Proac tablette anniversary speakers and iPod Touch into a musical fidelity VDAC via a pure i20 digital transport. Too much information perhaps?

The question is where do I go now? Detail is present, a snap and drive is present too. I can hear individual instruments - great, but how do I get more full bodied sound, but more importantly where is the music that I remember so fondly from my youth with vinyl?

I had convinced myself that it was analogue reproduction that was missing. All those Os and Is are too stark, too precise for me. Right then save up for a Rakson Radius or pick up a used Technics SL 1210 and modify it. But wait, I have hundreds of CDs but only a couple of dozen Vinyl LPs. That is the aforementioned mistake. My digital path is set. Realistically I need to maximise my digital output in a more musical, warmer (analogue like) way.

Here is the question. How do I upgrade my system without replacing the main Cyrus items? My inclination is to save up for a really good DAC for both CD and iPod. Will a TeddyDAC or Moon 300d give me that warmer musicality I seek and if so which would be better? Or would they be overkill for my setup?

Do I upgrade the CD6 to an 8 or even CDXTSE Transport. Do I upgrade the VDAC through a company such as Fidelity Audio, who you recently highlighted?

My musical preference is Rock and a good, powerful bass is quite important. I know my system isn’t great in this department and needs a boost. I believe the Cyrus PSX-R will broaden the sound and add bass, but I don’t want to add one just yet due to space limitations. Ideally, budget is limited to the cost of the (Simaudio) Moon but £1500 is kind of ceiling for me. I do like the look of the TeddyDac though.

Many thanks,

Ray Bennett,
Lancashire

You will not easily get an analogue like sound even from better DACs, unless you go stratospheric to dCS with their Ringdacs. The best you could do would be to buy a Chord Electronics DAC64 second hand. This has a really warm, smooth sound that shades most else. The reasons is that, apart from being a good DAC, it also has rolled down treble above 16kHz. The subsequent QBD76 wasn’t the same at all. There are few alternatives to this at £1500, although the Canor CD2 may be within your reach and is a superb way to listen to CD.

NK
World Designs revive KEL84, a new kit amplifier using EL84 output valves. Tony Bolton listens.

Long standing readers of this magazine may well remember the DIY supplements that used to be a regular feature of Hi-Fi World some years ago. One of the designs was for the original version of this amp, the KEL84. Several years on, the fundamental circuit design has remained unchanged, with the pentode sections of ECF80 triode/pentodes providing the first amplification stage. The triode section is used as a phase splitter. Power is provided by a pair of EL84s working in push/pull. The amp is available in two forms, one with the five line level inputs as in this example, and the other with just a single input that can be used as a power amplifier. If purchased as a self build kit, the amp costs £750.00 for this model (the single input unit costing £625.00). Either can be supplied built and tested for another £200.00. There is also the XL option which includes Vishay HT supply capacitors, Schottky Rectifier Diodes for a lower noise heater supply, Soniqs polypropylene coupling capacitors and Soniqs interconnect cable for the internal wiring.

I was impressed by the finish and fit of the pre-made example that was sent to me. I particularly liked the weight and feel of the chromed solid brass knobs that control volume and source selection. The alloy facia and pressed steel casework were neatly executed and the whole thing gave the impression of being more expensive than it actually is. The only let down was the cheap looking speaker terminals at the back which, to me, sat a little incongruously alongside rows of gold plated phono sockets.

I initially set it up in the spare room plugged into the Piega Premium 1 loudspeakers and fed it with a mixture of classical music and the IsoTek burn in disc for 24 hours. I have a bit of a love/hate thing going with the Piegas. They are, at times,scarily open and honest in their sound, but plugged into the KEL 84, I found myself quite taken by the combination. The high frequency clarity of the ribbon tweeters blended very well with the more gentle approach of this amp, each seeming to feed the other's positive aspects and producing some of the best sounds that I have had from these speakers.

The following day I set the amp up in place of the TAP-X/Quad combination that is normally resident in the upstairs system, and settled down in front of my Kellys. These are rated at 95dB efficiency and a nominal 6 Ohm impedance, so were a fairly friendly load for the KEL84 to drive.

My first impression, as Previn and the LSO started the 'Planet Suite', was of a certain similarity to the sound I get from my Leak Stereo 20;
THE EL84 OUTPUT VALVE

The EL84 power pentode valve (6BQ5 in North America) dates from 1953 when it was developed by Philips for the Mullard 5-10 amplifier. It proved popular with makers of both audio equipment and guitar amps, being used in both Watkins and Vox models, and later by Fender and Mesa Boogie. It was originally developed to eliminate the need for pre-amplifier triodes in radios, having higher gain than normal which allowed it to produce full output from a relatively weak signal. This simplified the radio circuits, making them cheaper to produce.

The E prefix indicates a heater voltage of 6.3V although guitar amps frequently exceed this. Production currently comes from Russia (Sovtek and Electro-Harmonix) Slovakia (JJ Electronics) and Serbia (EI).

The ECF80 triode/pentode was a Mullard design introduced in 1954 as a VHF frequency changer for use in televisions. The valve has two cathodes so is two independent valves housed within the one envelope. It was friendly and easy-going with a smoothness and depth that are rarely heard from any other source than a valve amp. The difference to the Leak was in the higher frequencies, where there was far greater extension and clarity. I love the Leak dearly, but it does get a little soft and gentle at the frequency extremes. The KEL84 provided a more modern take on things, with a firmer sound to the treble, giving it a greater sense of air than I would have heard through the Stereo 20.

Moving on from the Hoist, I played a 1974 LP of Oscar Peterson and Dizzy Gillespie. The staging...
Inspire Hi-Fi

MONARCH Hi-Fi

TURNTABLE

See and hear the Monarch at the Munich High End Show
3rd to 6th May 2012

Also see and hear the Monarch at the Audio World Show
24th & 25th March 2012

Introducing an altogether Regal approach
to the highest fidelity possible...
The Monarch direct drive turntable.
Engineered luxury for the very best in sound
reproduction, looks and extreme quality.

Verdict:
Startlingly musical performer with blistering
speed and dynamics, yet smoothness,
sophistication and purity of tone too. Superb.

For:
- Superb transient speed
- Excellent dynamics
- Tonal purity
- Overall musicality

Against:
- nothing

The Monarch turntable takes both 9 and 12 inch arms.
Available with SME, Audio Origami, Origin Live and other tonearms.

Pictured Monarch shows an SME 12 Inch tonearm

Superb Part Exchange Deals given against your current turntable
Call us for an instant quote...

Information & Sales Hotline 01246 827272

www.inspirehifi.co.uk

Unit 11 / Markham Vale Environment Centre / Markham Vale / Chesterfield S44 5HY
T: 01246 827272 M: 07932 367555 E: robert@inspirehifi.co.uk

World Radio History
Johnny Mercer’s ‘Autumn Leaves’. and the treble reaching over to the of this is unusual, with the piano stretching across between the speakers, bass notes appearing just to the right of the left hand cabinet and the treble reaching over to the centre of the right hand cones, as though the pianist was sitting with his back to you and the keyboard in view. Gillespie’s trumpet was placed in front of this, and on several tracks I could hear his foot tapping out the beat. The images were very securely located and almost physically tangible.

The most compelling thing was the infectiousness of the rhythm. I found my self joining Gillespie in keeping time to a very bebop rendition of Johnny Mercer’s ‘Autumn Leaves’.

I got caught up in the beat again when playing through The Supremes’ 1966 LP ‘A Go-Go’. This record has the honour of being the first disc by an all girl group to top the American Billboard charts, and reached number 15 in the UK. Most of the tracks are covers of other motown hits but it also features the singles ‘Love Is Like An Itching In My Heart’ and ‘You Can’t Hurry Love’. This mono record was handled with ease, the girls standing a bit in front of the speakers with their backing band occupying about three-quarters of the area between the cabinets. The timing was tight and the sound enjoyable, and although it was not the weightiest bass that I have heard, it was supple and quite vibrant.

The bass notes tend to be the driving force in most dance music, and on Entheogenic’s sixth album ‘Gaia Sophia’ they went very low in places. This is only available as a download so I took a copy of the FLAC option when it was released late last year. I would call it midweight progressive trance, where the focus is split between the drive of the bass and the shapes and colours created by the samples and electronic sounds and effects moving around above it. Again the KEL84 made it seem effortlessly enjoyable to listen to and thoroughly involving.

The only real drawback that I can see with this amp is the fairly low power output. Allied to efficient speakers like my Kellys it wasn’t a problem, but a bit of care in matching suitable transducers is needed. Apart from that I found it to have a very musical heart, and a willing and lucid sound that presented the delights of thermionic amplification in a very persuasive way. If it was alive, I would liken it to a golden retriever, with a sunny temperament and a good dose of bounce and go. Like everything it is not perfect, but for the price it ticks all of the relevant boxes and does so with such a sweet sounding nature that it should win many friends.

**SYSTEM USED:**
- Linn LP12/ Hadcock 242 Cryo/ Clearaudio Concept.
- GSP Audio Revelation and Elevator phono stage and step-up.
- Njoe Tjobo 400 Reference CD player.
- Kelly KT3 loudspeakers.

**MEASURED PERFORMANCE**

- **Power output measured** 12 Watts into 8 Ohms and 10 Watts into 4 Ohms so the output transformer looks optimised for around 6 Ohms and handles a lower load quite nicely. Ideally a valve amplifier will give the same amount of power from an 8 Ohm winding feeding an 8 Ohm load, as a 4 Ohm winding feeding a 4 Ohm load; KEL 84 manages well to manage a similar performance from one winding. Distortion levels do rise when feeding a 4 Ohm load though. At 1 Watt a figure of just 0.06% at 1kHz into a 8 Ohm load is good. At 10kHz this rose to 0.22% (the distortion figure we quote), all second harmonic our spectrum analysis shows. The output transformers swung full output clearly at 40Hz too, showing there is enough iron in the core to avoid premature magnetic saturation (overload) and the soft bass it produces.

- **Input sensitivity** was a useful 350mV for full output and noise -87dB. Hum measured 1mV out at 100Hz, acceptably low to be barely audible even close to a loudspeaker.

- **Frequency response** was limited to 20.4kHz before rolling away slowly so KEL 84 will sound fairly easy going. At the low end bass rolled down slowly below 50Hz, measuring -1dB down at 16Hz.

- **KEL 84 measured neatly all round.**

**VERDICT**

- **Affordable, sonically impressive valve amp that can be bought as a kit or pre-made.**

**FOR**
- musical and friendly sound
- excellent imaging
- good timing

**AGAINST**
- nothing much

**MUSIC USED:**
- The Supremes ‘A Go-Go’ Tamla Motown Records TML 11039 1966
- Oscar Peterson and Dizzy Gillespie ‘Oscar Peterson and Dizzy Gillespie’ Pablo Records 2310 740 1974
**Pure Transmission Principles at their finest!**

The new XLR sockets feature a (Alpha) pure copper conductors for minimal impedance and a special nonresonant nylon/fiberglass housing incorporating Furutech' ultra-effective Piezo Ceramic Damping Material. Unique to FT-796F and FT-785M XLR sockets are nonmagnetic stainless steel plates incorporated into the piezo compound using a special patent-pending process.

**FT-903 RCAs feature a (Alpha) pure-copper conductor for minimal impedance with a heat resistant LCP (Liquid Crystal Polymer Resin) housing. LCP is a superior damping material that is also incorporated into the chassis nut to ensure there are no disturbing resonances. The construction of the FT-903 is patent pending and its design

**FURUTECH Co., Ltd.**
Tokyo Japan

e-mail: service@furutech.com
URL: www.furutech.com

---

**Good loudspeaker cables do not have to be expensive**

**TWIST**

cuts the cost of enjoying your music

Twist loudspeaker cable has been designed by taking our best cable, Ninja DCT++, eliminating all the parts of the design that make it expensive and using the good design features that remain. Price is only £3.50 per metre.

**TRY IT FOR FREE - First 50 customers get 1m FREE sample**

Call 01332 342233 or
Email to: sales@blackrhodium.co.uk

---

**Emis Audio**

**EMIS > SHEFFIELD > ENGLAND**

**HVA1 Valve Amplifier**

Five Hi-Fi World globes awarded January 2012

“a sound that not only left me deeply impressed, I was actually quite taken aback.”

Noel keywood Hi-Fi World

www.emisaudio.co.uk
T: 07425 568989 E: brian@emisaudio.co.uk
**BLACK RHODIUM ARIA INTERCONNECT £50 PER METRE**

It might not look particularly eye catching — despite the use of Eichmann Bullet plugs — but the quality of this cable lies within as it features 99.99% pure silver, PTFE insulation to reduce dielectric distortion along with a double braided, silver-plated, copper screen to, again, reduce RFI distortion. As with other Black Rhodium cables, the cable is also treated by cryogenic freezing to improve depth and clarity.

I compared the Aria with my Avid SCT reference examples (£1,370 per metre). After playing the first few seconds of the Sugababes’ highly compressed track, ‘Stronger’, I was impressed by the Aria’s surprising degree of smoothness that calmed a lot of the more raucous upper-mid frequencies. The excessive peak limiting was not eradicated, the Aria retained a distinct sense of transparency and the smoothness should not be seen as some sort of palliative blanket, rather the result of distortion removal which smoothed out some of this track’s more angular approach. Bass was also a touch more powerful and weighty but retained all of its distinct character.

Moving to Barclay James Harvest and ‘Sideshow’, the introductory electric guitar occupied more space than the reference Avid SCTs, providing a greater resonance and an overall sense of calm. The trademark smoothness helped the lead vocal to project a calm, cool control while the tight bass solidly rooted the track as a whole, giving the song a fulcrum.

Moving to vinyl and Kraftwerk’s ‘Radioactivity’, I decided to up the pressure by introducing Black Rhodium’s own very expensive Cantata cables (£2,400 per metre) to see how the Arias’ would cope. The Cantata has a tremendous ability to draw out the finest detail yet the Aria was no shrinking violet, mining a rich seam to delight the ear. Bass was truer and more finely sculptured via the Cantata but the Aria drove a long way down the same road, being powerful and full of notable character. Finally, he Cantata displayed sublime clarity, emphasising black silences but the Aria also tackled distortion well, reducing it to such an extent that a wealth of detail is released from the muck.

Displaying many attributes of its more expensive brother, the Cantata, the Aria has a smooth personality that betrays a welcome attention to tackling destructive distortion. Although this cable is hardly cheap, for high-end audiophile use, the Aria provides an excellent performance envelope.

- Contact: +44 (0)1332 342233
  www.blackrhodium.co.uk

**KNOSTI DISCO ANTISTAT £50**

Vinyl fans looking for a record cleaner tend to be pushed into one of two price point ghettos. There’s the evaporative, alcohol-based liquid and cleaning pad approach, yours for under a tenner, or there’s the record cleaning machine at a starting price of £400. The Knosti Disco Antistat is a more balanced £50 option for those on a budget.

Ingeniously designed and compact, in use you fill a narrow plastic bath with the supplied record cleaning liquid, clamp your mucky vinyl LP between two plastic hemispheres and lower the now spindled record into the bath’s runners. To clean, you manually rotate the semi-submerged LP which is then scrubbed by submerged, fine-haired, brushes that clean both sides, simultaneously. How many times you rotate is down to personal choice but I moved the LP 40 times to the right and then reversed the process, rotating 40 times to the left. Once complete, you lift off the LP, remove it from the clamped spindle and place it on the supplied drying rack.

I tested the gadget on a couple of nasty looking charity shop-sourced LPs and, for the price, the results were excellent with a significant reduction in clicks and pops plus the removal of much of that attendant Rice Krispies noise that often accompanies older, unkempt, records. Excessively dirty records can be treated numerous times with the Antistat.

One significant improvement is the partial removal of the inherent mould release agent that every record that has ever existed contains, muffling dynamics and harming clarity. Highly recommended for those looking for more than a basic brush/liquid cleaner system but who cannot afford a cleaning machine.

For those who can afford a cleaning machine, the Antistat is a superb ‘pre-wash’. If you do have such a beast then dump the Disco-supplied liquid and replace it with L’Art Du Son (£30 per bottle from Analogue Seduction and a great upgrade for manual LP cleaners too). Use the Antistat in the same way but, instead of placing on the rack, dry it on the machine and then clean the record in your usual way, afterwards.

The difference is startling. The extra Antistat treatment results in a sumptuous, rich, gloriously clear presentation that is worth the extra time and effort. For record cleaning machine users, too, the Antistat is a bargain.

- Contact: +44 (0)1733 350878
  www.analogueseduction.net
Media Message

Media players are the natural successor to CD players. Noel Keywood explains why here...

Reviewing a wide cross section of network players, from cheap to expensive all packed with a myriad of differing features, has brought me to a simple conclusion: the easiest, most flexible and best sounding way of playing music is from a memory stick. There's no need for a home network, Cat5 cables, wi-fi or any other complication. If you want to hear high resolution digital music files at their best, and play them without having to wrestle your UPnP server into submission beforehand, a simple media player is the best solution. There is only one problem - there aren't any.

Well, there are a few, but they have little presence. The reason is lack of perceived need. At present people want to be able to play their entire 4000 album collection it seems from conversations I have had. But then, I recall people once wanted to play all their LPs in stacks on an auto-changer. The reduced analogue bandwidth of long Cat 5 cables adds jitter, a well known and measurable phenomenon that occurs because the digital zero crossing point is made less determinate. Additionally, long cables act as excellent radio aerials, adding in interference. So like auto-changers of yore, you pay a penalty for the convenience of a network player. Better to play one album at a time, as on a Garrard 401! This is what a Media player does. It swaps convenience for performance.

We discovered three media player can do, the better value it is. Then we were told about the new Aune S1, above, from China. The best approach is to keep the signal chain pure and simple - and this means eliminating the home network used by network players, for the reasons explained.

A Media Player simplifies and purifies the signal chain. Use your feet and KISS - keep it simple stupid!

And do we really want audio quality compromised by the provision of internet radio? And why is the computer being used as a music server, when it has so much else to do? Turning off a computer's running services, for example, to improve sound quality is a bit like taking the wing mirrors off a Series II Land.
Rover to make it go faster. A work horse is not a Ferrari and tuning it up can get a little daft. Shuting down services in that dark back room that is ‘msconfig’ on a Windows PC can cause all sorts of problems and it may just be unwise to switch off a hyperactive anti-virus programme in the hope it will make Pixie Lott sound better. Even with Foobar running and music being streamed from memory to eliminate the hard disc, the digital stream still has to negotiate tens of metres of thoroughly ordinary Cat 5 cable. Long cables act as aerials, as those living close to Crystal Palace and Alexandra Palace transmitters know well. These days, however, many of us are surrounded by wi-fi transmitters busy chirping away in digital. If your wi-fi connected computer can see ten wi-fi clients, then your cable network will be picking them up too.

In all, this is a thoroughly poor way of getting music into the hi-fi, because random radio frequency noise and poor cable characteristics add up to timing errors and jitter, even in packetised data. And hobbling the computer too much will likely crash it in the end.

A media player avoids all this. It plays music files from a USB memory stick or SD card — and that’s all! Ethernet cables and computer religion are not needed in this arrangement. Download music files onto your computer’s hard drive, transfer them to a memory stick and walk it to the hi-fi. Our diagram illustrates this approach, comparing it with a Network Player setup. Uncompressed high resolution downloads typically come in at 100MB, so ten songs will occupy 1GB and around 80 songs can be accommodated on a premium 8GB LaCie Whizkey, costing £30. Obviously, ordinary memory costs a lot less, £12 or so for 8GB, and keys can hold up to 640 songs on a 64GB key costing £70 or so. Lossless compression technologies such as FLAC reduce file size by around 50%, keeping the situation manageable, especially with huge 24/192 downloads becoming available.

Nowadays, large memory capacities and affordable prices make using flash memory keys, or memory sticks, a viable music storage method. Players commonly feature a rear port for long term storage — say a library of hundreds of songs — and a front port for a quick update of content, perhaps a newly downloaded album. Current crop UK network players have USB ports only, but in the Pro world storing music to SD card is more popular. These cards are small and can be housed within devices like portable digital audio recorders to avoid handling damage. An external drive can be added too.

ANATOMY OF A PLAYER

Built entirely around small chips mounted on tightly packed circuit boards, media players need not be large. However, track navigation is a difficult task that demands a big, clear screen, especially if it is to be seen across a room, possibly in low lighting. This limits minimum size, as well as cost. The alternative is a remote control with a screen, but then supplying the screen with power becomes an issue.

To play 24/192 files the player needs a high quality on-board DAC, simply because 24/192 cannot be reliably handled by S/PDIF hardware. Although 192kHz sample rate offers an analogue bandwidth of 96kHz, the Digital-to-Analogue Convertor (DAC) in practice needs an analogue audio bandwidth of at least 30kHz, with a gentle roll off above this frequency to minimise phase shifts — a situation common in AV receivers. The resultant audio output can then be delivered to any hi-fi amplifier, ensuring compatibility.

The Aune S1 pictured here and reviewed next month reads from USB memory stick and SD card and its internal DAC reaches 90kHz with a 192kHz sample rate signal our measurements show.

SOUND QUALITY

Sound quality from a good key in a Media Player is audibly superior to that of a computer music server connected via ethernet. There is less glare in the upper midband, giving digital an almost warm quality at times, at least from a good modern recording, or transcription from analogue. With decent 24bit resolution recordings fine details appear in the background and a sense of air and space at last emerges from digital, and here playing direct from USB memory shows clear improvements over an ethernet link.

Sound quality differences are more apparent with 24bit recordings; 16bits is less revealing in that it is commonly stripped of real detail and subtlety in the first place, so there is little left for the ear to latch onto. If you have ever tried critical listening with DAB radio and MP2 you will know what I mean. As high resolution 24bit music files become available for download and play through various routes in the home, differences will become more obvious and the worth of a dedicated high fidelity Media player will become apparent.

**QLS HI-FI QA-550 MEDIA PLAYER**

*From their website www.qls hi-fi.com*

The QA-550 remote digital WAV transport is designed from the ground up to be a very high-end audiophile audio playback solution. Forget your old, bulky and fragile CD transport/player, which is based on technology that is over 20 year old.

WAV Player is replace your CD player with high accuracy clock and the sophisticated digital output circuit, far superior to most CD player, no matter the speed, stability, error correction, jitter reduction. They are actually the technology of different eras.

It provides better sound quality and larger storage capacity, utilising cheap and widely available SD memory cards that can each store up to 16GB of uncompressed WAV files. CD is a thing of the past.

It effectively isolates the serious interference from within the PC/Mac case, e.g. the high frequency data signals, the switching-mode power supply and the FAN motors, etc...

The ideal CD transport is not a CD transport, its one of these WAV SD transports.

**Reasons why the QA-550 is better than a traditional CD transport...**

No moving parts to wear out. Consistent performance every time!

Won’t suffer from stability issues caused by dust, dirt or smoke

No reason to take your valuable CDs out of their cases each time you want to listen

WAV files are error corrected so don’t need real time error correction unlike CDs

Far less jitter than most CD transports / players, even very pricey ones. Sounds better
subtlety, dynamics and coherence, there's nothing to dislike here"

"still our favourite for its sonic ability and its jaw-dropping price"

"The atmosphere and midrange that they add to a performance is very noticeable and this translates into an enveloping and emotive musical experience"

Carnival SilverScreen HI-FI WORLD July 2008
Project’s tiny Media Box S is a dinky £249 toy designed for the iPod age. It plays music from either a USB memory stick (Flash memory drive) or an SD card. Unfortunately, for our purposes in illustrating how a player like this could represent the future, it has been configured for the past, conceived to get low quality music files, presumably those from an iPod or MP3 player, into the hi-fi. The Media Box S handles only compressed music files, meaning MP3, AAC and WMA. It would not play a WMA at 44.1 kHz sample rate, so you cannot rip your CDs and run them through it; they must be turned into MP3 or AAC first, degrading sound quality in this process.

This being the case the Media Box S seemingly distances media card playback from audiophile standards but that is only because it is built around a Rohm BU9458KV chip with USB and SD card receptors, DAC and much else on-board, but purposed for lo-fi playback only. This product still demonstrates the form a media player takes. It has a navigation screen and a remote control, and both digital and analogue outputs. The Media Box S relies on a tiny screen the size of a postage stamp that isn’t easy to read, especially if you want to jump to specific tracks rather than just play an album. The Musical Fidelity Clic or Logitech Squeezebox offer better examples of legible track readout, but perhaps the ambitious Cyrus remote control with full colour screen is the way such players would go.

And how did it sound? Well, very reasonable within the limitations of compressed file formats. Measurement showed it gets everything right, but distortion, noise and jitter are all on the high side by true hi-fi standards, if not by portable standards. There was an accurate basic tonal balance, fairly well defined dynamic contrasts but the expected sense of subtle opaqueness and lack of real insight, air and space that characterises the breed was absent. Ironically, media players can better overcome such limitations in digital than most other playback solutions but this one just was not purposed to do so.

**VERDICT**

A simple way to play MP3 and AAC AND WMA files, the Media Box S works well enough by compressed music standards.

**PROJECT MEDIA BOX S £249**

Henley Designs

+44 (0)1235 511166

www.henleydesigns.co.uk

**FOR**

- small size
- ease of use
- good basic performance

**AGAINST**

- illegible screen
- no WAV format
- simple remote

**MEASURED PERFORMANCE**

<table>
<thead>
<tr>
<th>Frequency response measured flat to 20kHz our white noise analysis shows. Distortion was high, measuring 0.45% at -60dB, compared to the 0.22% possible from 16bit resolution. There was a little more noise than CD and this helped limit EIAJ Dynamic Range to 91dB, against 98dB from CD. Output at 0dB was half that of CD, measuring 1V. Jitter levels were reasonable, around 100pS except for a broad 450pS peak around 450Hz. For a compressed media player this is a fair result. NK</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FREQUENCY RESPONSE</strong></td>
</tr>
<tr>
<td><strong>DISTORTION</strong></td>
</tr>
<tr>
<td><strong>Frequency response (±1dB)</strong></td>
</tr>
<tr>
<td><strong>Distortion</strong></td>
</tr>
<tr>
<td><strong>Separation (1kHz)</strong></td>
</tr>
<tr>
<td><strong>Noise (IEC A)</strong></td>
</tr>
<tr>
<td><strong>Dynamic range</strong></td>
</tr>
<tr>
<td><strong>Output</strong></td>
</tr>
<tr>
<td><strong>Jitter</strong></td>
</tr>
</tbody>
</table>
Subscribe to our eco-friendly e-edition of Hi-Fi World and receive a 50% discount!!!

- Receive your issue a week before on-sale dates.
- Be the first to grab a bargain in our Free Reader Classified Ads.
- In-house lab. tests to AES and IEC standards
- Run by dedicated hi-fi engineers & enthusiasts.
- No missed issues, or postal delays.
- Access your issues from anywhere in the World.
- PC and Mac friendly.
- Eco-friendly.

Subscribe today and receive 12 issues for £20 – that's an amazing £1.90 per issue!

check out our free trial issue

VISIT OUR WEBSITE: www.hi-fiworld.co.uk and select "ELECTRONIC EDITION"

To purchase your e-edition click here
WIN A TELLURIUM Q IRIDIUM PHONO STAGE WORTH £1380 IN THIS MONTH'S GREAT GIVEAWAY!

Here's your chance to win a Tellurium Q Iridium phono stage. Read what we said in our review in the April 2012 issue and answer the questions, right on this page.

"Spanning just 165 x 57 x 166mm and weighing a mere 1.2kg, the Iridium Phono chassis features a volume control on the front. According to Colin Wonfor, "To give you the option of driving an amplifier directly without having to use a pre-amp. Also, because the phono amp has its own power supply, it won't be interfered with by the digital side, as you might with a proper pre-amp. There's less noise and hum loops."

We chose a volume control over DIP switches because, when looking at average cartridges and their prices we decided to come up with a sonic range that's not bad: between ten and a hundred Ohms, for simplicity. Saying that, we are currently working on a more advanced version of this phono amp which will feature an automatic matching system within it," said Wonfor.

There are two outputs on the back. One is termed 'Buffer' for a fixed level that can be fed into pre-amps and the other is called 'Volume' which allows the unit's volume knob to control the output level. There's also a choice of MM and MC sockets. A toggle switch allows you to hook up two turntables and flick between them.

Inside is a fully solid state system. There is a reason that Wonfor decided not to go valve in his design. "I built valve kit years ago and they're not as quiet. To do it properly would mean a unit that is too large and too expensive. You'd need a linear power supply of 300W to 400W that would have to be very fast. It'd be far too expensive, especially as we like to make our products in Britain which is what the Iridium Phono is — every bit of it. If there is a problem, we can sort it out today. We haven't got to wait for an airplane to take us to China and then get someone to translate and then get back to England and then it's still wrong."

Inside the Iridium is a toroidal power transformer which connects to a linear regulator, driving the output buffer, another drives the moving coil facility and yet another drives the moving magnet circuit, helping to reduce distortion. To that end, there is also a filter on the mains output while, internally, Tellurium Q's low noise cable is in there too."

RULES AND CONDITIONS OF ENTRY

- ONLY ONE ENTRY PER HOUSEHOLD
- MULTIPLE ENTRIES WILL BE AUTOMATICALLY DISQUALIFIED
- PURCHASE OF THE MAGAZINE IS NOT A PRE-CONDITION OF ENTRY
- NO CORRESPONDENCE WILL BE ENTERED INTO
- THE EDITOR'S DECISION IS FINAL
- NO EMPLOYEES OF AUDIO PUBLISHING LIMITED, OR OF ANY COMPANIES ASSOCIATED WITH THE PRODUCTION OR DISTRIBUTION OF THE PRIZES, MAY ENTER

For a chance to win this great prize, just answer the following four easy questions. Send your entries on a postcard only by 31st April 2012 to:

May 2012 Competition, Hi-Fi World magazine, Unit G4, Argo House, Kilburn Park Road, London NW6 5LF

QUESTIONS

1. What control is a feature?
   [a] tone
   [b] phase
   [c] volume
   [d] brightness

2. What does Buffer provide?
   [a] weak level
   [b] fixed level
   [c] excessive level
   [d] uneven level

3. Are there MM and MC sockets?
   [a] yes
   [b] no
   [c] possibly
   [d] maybe

4. Does the transformer connect to?
   [a] a linear regulator
   [b] a circular defibrillator
   [c] a defibrillator
   [d] an electric mouse

May 2012 Competition, Hi-Fi World magazine, Unit G4, Argo House, Kilburn Park Road, London NW6 5LF

entries will be accepted on a postcard only

FEBRUARY 2012 ALR JORDAN CLASSIC 2 WINNER: Mr. W. C. McRae of Beaminster, Dorset

World Radio History
Our Four Cornerstones are: Quality - Performance - Value - Service

You won’t be disappointed!

Designed in Leicester. Hand built in our factory in China. Finished and tested in Leicester. We design and wind our own transformers using the best copper and iron. Using top worldwide parts from Rubicon, ALPS, Jensen, JJ, SCR, Solen, Full Music. Our commitment to quality and service means you are assured of advice, upgrades, service and spares for at least the 20 year minimum expected life of our amplifiers. You’re assured of good performance new or second hand!

MB845 i mono blocks
Fabulous huge 845 triode mono block amplifiers. NEW improved version of the original. Now with “Low Distortion Tertiary” transformers 90+90w. 5 Globes Hi Fi World
From £3849.95

ST20PP 15+15W Amp
Guaranteed to amaze and delight you Mullard’s amazing EL84 makes this amplifier perform way beyond its modest size. Now with headphone socket. Not sure about valves? Try this with our money back guarantee.
Only £549.95

MB150 150w Mono Blocks
150+150w of pure UL valve power (or 100 + 100w of pure triode). Using 4 KT88 or KT120. Based on our award winning MB90s. Unlike transistors, these giants retain the Icon warmth and texture at volumes, giving massive headroom and very low distortion. Various upgrades available. Now available with the new KT120!
Only £2999.00 Pair

Our Best Ever Mid Range Amplifier!
Stereo 40 MK III our best ever value amplifier. It has everything! 40+40 watts, Triode mode, Valve rectifier. Remote control. Tape loop. Standby switch. KT66/KT88 EL34/6550 compatible. Two rave reviews in HFW and HFN.
From Only £1399

NEW Stereo 60 MK III 75+75w
Total redesign with new KT120s New Tertiary transformers New power supply, very low distortion. Huge power in 1 box! "OUTSTANDING!" Hi Fi News group test April 2012
From £2199.95

NEW MB805 SE Mono blocks
45+45 Watts of Single Ended Heaven
From £5499.95 (upgradable)

NEW Stereo 25 MK II
NEW high quality headphone socket for private listening. NEW 6SN7/6SL7 valves for better definition. Upgraded output transformers for better bandwidth. 35+35w. Alps pot. 4/8Ω outputs. Supplied transparent cover
FREE EL34 UPGRADE WORTH £100 (limited offer)

From only £1549.95 (complete)

ST40 III G57 Pure Triode Amp
30+30w pure triode. No feedback. Created as an affordable alternative to the high cost of 300Bs All the attributes of vintage triodes only £60 for a new set of output valves. Warm creamy sound lots of detail. Astonishing sound stage. All the other features of our Stereo III inc remote control
From only £1549.95 (complete)

MB805 High End Mono Blocks
45+45 Watts of Single Ended Heaven
From £5499.95

Electrostatics

King Sound
Outstanding Value! Compact, Efficient & Beautiful The Queen II is a compact efficient 3 way design, less conspicuous than a full range panel needing only 40 Watts to fill the average room with sublime sounds. Stunnningly transparent. Excellent deep bass from hybrid ABR
Only 121Hx28Wx31D (cm)
£1999.95

The Icon CDX1 CD Player
Several unique features 3 power supplies. Valve rectifier, valve & choke regulated. Hard wired analogue output stage. With a top quality 192kHz 24bit player. Upgradeable.
From £1299.95 (upgradable)

"Great for any mood or style of music"
Awarded 5 Globes Hi Fi World

NEW LA4 MK II Line Preamplifier
"...Majored on musical flow and attention to detail. Distortion very low 0.0003%. Enormous headroom, bandwidth very wide, very low noise..." NK Hi Fi World, awarded 5 Globes
From only £999.95 (upgradable)

NEW PS 3 All Valve Phono Stage
"Our Fave Affordable High End Phono Stage" N.K. Hi Fi World. Awarded 5 "Globes" "Outstanding Product" Hi Fi News
All triode. Passive RIAA. Custom British MC TX option. Very quiet, high output. With the best possible Power supply. Valve rectified & regulated for definition and smoothness, 14kg.
From only £1759.95 (complete inc MC TX)


Try this with our money back guarantee.

STEREO 60 II line Stage
"Our Very Affordable High End Mono Blocks"
N.K. Hi Fi World. Awarded 5 "Globes" "Outstanding Product" Hi Fi News
45+45 Watts of Single Ended Heaven
From £5499.95

...Bristling with energy, smooth & sweet...
Awarded 5 Globes Hi Fi World

FREE EL34 UPGRADE WORTH £100 lumped otter'

Stereo 25 Mk II
"Our Fave Affordable High End Mono Blocks"
Stereo 25 MK II
"Our Fave Affordable High End Mono Blocks"
N.K. Hi Fi World. Awarded 5 "Globes" "Outstanding Product" Hi Fi News
All triode. Passive RIAA. Custom British MC TX option. Very quiet, high output. With the best possible Power supply. Valve rectified & regulated for definition and smoothness, 14kg.
From only £1759.95 (complete inc MC TX)

Stereo 25 MK II
"Our Fave Affordable High End Mono Blocks"
Stereo 25 MK II
"Our Fave Affordable High End Mono Blocks"
N.K. Hi Fi World. Awarded 5 "Globes" "Outstanding Product" Hi Fi News
All triode. Passive RIAA. Custom British MC TX option. Very quiet, high output. With the best possible Power supply. Valve rectified & regulated for definition and smoothness, 14kg.
From only £1759.95 (complete inc MC TX)

Our other models at www.iconaudio.com
Buy through your dealer or direct from us. Export no problem! (EU £30 per box) Want to know more? Or ring us on +44 (0)116 2440593 email sales@iconaudio.com

351 Aylestone Road Leicester LE2 8TA (U.K.)

*(whilst stocks last. Conditions apply ask for details) Prices correct with 25% UK VAT at time of press may change subject to change 05.2011. E & O E UK Visa, MasterCard AMEX and debit cards accepted
TURNTABLES

REGA RP1 2010 £235
Finely crafted, precise, and easy to set up and use. Makes a great first 'real' hi-fi turntable.

REGA RP2 2008 £300
Excellent value for money. Simple to set up and fine sound.

REGA RP3-24 2008 £405
Seminal affordable audiophile deck with fine built-in tonearm. Tweakable and really sings with optional £150 outboard power supply.

MICHELL TECNODEC 2003 £579
Superb introduction to Michell turntables - on a budget. Top quality build and elegant design mean it's still the class of the mid-price field.

FUNK FIRM VECTOR II 2009 £860
Innovative engineering gives a nimble, pacey and musical sound that's one of the best at the price.

MICHELL GYRODEC SE 2005 £1,138
Design icon with superlative build and finish. Sound is beautifully smooth, effortless and exceptionally expansive. No longer peerless at the price, but still a brilliant platform.

MARANTZ TT1551 2005 £1,299
Cracking all in one deck/arm/carat will take care of the sound at the price, but still a brilliant platform.

ROKSAN RADIUS 5.2 2011 £1,450
Although getting expensive, the latest Radius is a highly grown up package with a flowing and engaging nature; a fine package.

MICHELL ORBE 1995 £2,500
The top Michell disc spinner remains a superbly capable all rounder with powerful, spacious sound that's delicate and beguiling.

BRINKMANN BARDO 2010 £4,600
Unique high end direct drive turntable with amazing grip and focus, albeit not the most romantic of natures.

ACOUSTIC SIGNATURE STORM 2009 £12,500
Lavishly finished two box, two motor turntable with gorgeous Ikeda 407 tonearm bundled. Exceptionally stable and unfussy performer with a relaxed but highly enjoyable gait.

TONEARMS

REGA RB251 2009 £136
New twin belt drive and power supply make this a more commanding performer, although there's a substantial price hike. Speed, dynamics and detail are hard to beat anywhere near the price.
Tight, neutral sound with good tonality, but needs the right turntable. Excellent open yet lyrical sound.

SILVER 3C 2010 £ 599

ORIGIN LIVE
SILVER 3C 2010 £ 599
Excellent mid-price tonearm with a clean and open yet lyrical sound.

HADDOCK GH-242
EXPORT 2010 £ 770
Consumately musical, lyrical sounding tonearm, but needs the right turntable. Excellent value.

SME 309 1989 £ 767
Mid-price SME comes complete with cost-cut aluminium armtube and detachable headshell. Tight, neutral sound with good tonality, but lacks the IV's pace and precision.

FUNK FIRM FXR II 2010 £ 1,175
Clearly reworking of the ubiquitous Rega platform, the FXR II gives a wonderfully musical performance.

THE CLASSIC SYRINX PU3 UPDATED TO SPECTACULAR EFFECT. HAND MADE TO ORDER, WITH ANY MASS, LENGTH AND COLOUR YOU CARE FOR. FIT, FINISH AND BUILD QUALITY, THAT TURNS IN A DYNAMIC AND FINESS, MAKES THIS A GREAT DO-IT-ALL HIGH END ARM.

SME SERIES IV 1988 £ 620
Offers nine tenths of the SME IV's magic at just over half price. Exquisitely built and finished, and a design classic. Faces stiff competition these days, but lovely nevertheless.

SME 312S 2010 £ 1,750
Twelve inch magnesium alloy armtube plus SME V bearings makes an impressive transcription tool with an insightful yet composed sound. Superbute build completes the package.

GOLDRING G1042 1994 £ 589
One of the best MM's going, with sweet and extended treble and punchy, muscular bass.

ORTOFON VIVO BLUE 2011 £ 625
Super new budget moving coil cartridge from respected Danish manufacturer; a real step up from previous efforts.

DENON DL103R 2006 £ 695
Awkward to get working properly with a poor mounting arrangement, yet it rewards with a musical performance that makes similar priced cartridges sound cold.

DYNAVECTOR DV10X52003 £ 495
Distant descendent of the classic Ultimo 10X, this has warmth and sweetness in spades, allied to a punchy bass. Rests G1042 comfortably.

ORTOFON 2M BLACK 2007 £ 350
Staggeringly high-end MM that uses a stylus from the MC Jubilee and easily rivals similarly-priced MCs.

DYNAVECTOR DV20X-H2003 £ 395
Deliciously sweet sound with fantastic get-up-and-go makes this a great value budget MC. High output version works a treat with valve phono stages too.

BENZ MICRO GLIDER L2 2008 £ 650
Crisp, clean and detailed MC; particularly impressive at both ends of the frequency spectrum.

ZYX R-100H 2005 £ 799
Exceptionally tight sounding and detailed cartridge with the musical skills to match, this is up with the best at the price, with a presentation all of its own.

TRANSFIGURATION AXIA 2007 £ 890
Musically adept and highly subjective cartridge with impressive tracking abilities. Top end lift means careful matching required, however.

BENZ MICRO WOOD SL 2010 £ 945
Highly finessed Swiss moving coil that plays music with riflebolt precision.

CARTRIDGES
DIGITAL SOURCES
MUSICAL FIDELITY V-DAC £170
Clear, concise, low distortion sound belies giveaway price. Supertelevalue for money.
CAMBRIDGE AUDIO DACMAGIC £99
With a full range of facilities and fine imaging abilities.
ARCAM rDAC 2010 £300
A huge step forward for the budget DAC market.
MUSICAL FIDELITY M1 DAC 2010 £400
Surprisingly sophisticated upsampling DAC with oodles of detail and air but bass isn't quite as powerful as it could be.
STELLA DA100 SIGNATURE £750
Superbly finessed sounding DAC at the price, with strong driving bass and plenty of air and space.
CAMBRIDGE AZUR 846C 2006 £800
Well built CD player with a silky, yet detailed sound and a whole host of useful facilities. Excellent value for money.
NAIM CDS1 2008 £895
Naim's new italic '1' variant improves even further on the original mid-price classic, offering super tight, grippy and musical sound.
ROKSAN KANDY K2 CD 2010 £900
A charmingly musical performer at the price, this is a surprisingly sophisticated CD player for the money.
BENCHMARK DAC-1S 2009 £930
Power, precision and poise - allied to real seat-of-the-pants musically, this DAC justifies its premium price.
MUSICAL FIDELITY M3 CD 2011 £995
Excellent mid-price machine with slick slot loading and an open and inviting sound.
ELECTROCOMPANIET PD-1 2011 £1,250
Quirky but highly capable digital converter with an effective wireless radio option (£230) and balanced outputs.
SIMAUDIO MOON 300D 2010 £1,290
Lovely fluid sounding DAC with a deep, dark, velvety tonality.
CYPRESS CDB SE 2008 £1,350
Bespoke Servo Evolution mech makes this the most musically engaging machine at the price, with super smooth tonality to boot. Optional PSX-R adds bass and dimensionality.
DENON DCD2010AE 2010 £1,700
Powerful, open sound allied to a rich tonality and satisfying subbass make this an excellent mid-price buy.
NAIM DAC 2010 £1,995
Superb high end digital converter with a probing, punchy and forensically detailed sound.
MERIDIAN G08.2 2011 £2,400
Everyman's modern high end CD player, this stylish, well made Meridian has an extremely enjoyable yet refined and accurate sound.
MARANTZ SA-KI PEARL CD 2010 £2,500
Finely honed affordable high end silver disc spinner, this has a musical lucidity that's unexpected at this price.
LEEMA ANTILLA IIS ECO 2011 £2,995
Stable and smooth yet superbly detailed and musically engaging, this is class of the £3,000 CD player field.
CHORD QBD64 2008 £3,000
Bespoke architecture gives a uniquely musical sound that's beguiling yet proffers dizzying incision and grip.
ELECTROCOMPANIET EHC-1UP 2009 £3,450
Quirky yet extremely capable high end upsampling CD spinner, with a musical fluency that beguiles more than it impresses.
NAIM CD555/S55PS 2006 £14,000
Very probably the best CD player yet made - certainly the most expensive, a digital tour de force.

CAMBRIDGE AUDIO 640P 2009 £3,985
Excellent entry level design that raises the bar for budget phono stages.
ICON AUDIO PSI.2 2007 £599
Excellent valve phono stage with good range of facilities and fine imaging abilities.
GRAHAM SLEE ERA GOLD V 2004 £370
Warm, open and musical nature makes this a great budget phono stage.

GALLERY

STANDARDS

ACCUSTIC ARTS DRIVE I MK2/TUBE DAC 2 2007 £7,900
Superbly built high end CD transport and DAC combo that shows just what the format can be capable of. Very tangible, musical sound with wonderful dynamics and glintening harmonics. Only curious styling and clunky build detract from its brilliance!

DCS PAGANINI DAC £9,599
Digital rarely sounds better: dCS's bespoke Ring DAC makes for power, punch and insight on an epic scale. Add clock and upsampler for an even more profound experience.

NAIM MDX 2009 £6,485
Interesting one-box network enabled hard disk music system gives superb sonics together with impressive ease of use.

LINN KLIMAX DS 2007 £7,600
Landmark network music player, offering brilliant sonics at up to 24/96 resolution from hard disk/NAS. Expensive, but you can hear why...

PHONO STAGES
CAMBRIDGE AUDIO 640P 2009 £99
Excellent entry level design that raises the bar for budget phono stages. Crisp, smooth yet brightly lit sound on both MM and MC that's a vast improvement on most budget inboard designs.

Graham Slee Era Gold V 2004 £370
Warm, open and musical nature makes this a great budget phono stage.

ICON AUDIO PS1.2 2007 £599
Excellent valve phono stage with good range of facilities and fine imaging abilities.
STANDARDS

CHORD CHORDETTE DUAL 2010 £499  
Well presented mid price designed with detailed sound and USB input for archiving.

ASTIN TREW AT8000 2010 £890  
Expansive, detailed, powerful sound makes this a leading sub-£1,000 contender.

A.N.T. AUDIO KORA 3T LTD 2010 £695  
Exceptionally musical and natural sounding all discrete transistor phono stage, with highly lucid, valve-like presentation.

AVID PULSUS 2010 £1,100  
Powerful, propulsive, expansive sound puts this right at the top of the £1,000 phono stage tree.

QUAD QC24P 2007 £1,200  
Dynamic performer that can be used on its own as a complete phono-level preamp.

ICON AUDIO P53 2008 £1,500  
Super sounding valve phono preamplifier, with an expansive, engaging and organic nature that makes vinyl sheer joy!

SUTHERLAND 20/20 2010 £1,999  
Well engineered, smooth sounding solid-state phono stage with a charm of its own.

EMILLE ALLURE 2010 £2,495  
Just as the name suggests, this is a lovely way to play LP with an exceptionally open and lucid sound.

AVID PULSARE 2010 £3,800  
This superbly built, well specified phono stage has a powerful and authoritative sound that bristles with detail and energy.

WHIST P5.30 RDT SE2011 £4,500  
The least solid-state sounding Whist we’ve heard, this builds on the family strengths of precision and grip but adds a welcome poise and fluidity.

MAT AUDIO SIGNATURE 2011 £6,633  
Sophisticated sounding, unusually engineered MM and MC phono stage, but faces stiff competition at this lofty price.

AMPLIFIERS

ICON AUDIO STEREO 40/III 2010 £1,200  
Excellent starter tube integrated, with plenty of detail and an expansively musical sound.

AUDIOLAB 8000S 2006 £400  
In another life, this sold for three times the price, making it a stand-out bargain now. Very clean, powerful and tidy sound but not the world’s most beguiling.

NAIM NAIT Si 2007 £775  
The italic ' i ' version remains one of the most musically competent and dynamically engaging integrateds at the price.

CAMBRIDGE 840A V2 2007 £750  
Version 2 addresses version 1's weaknesses to turn in a mighty accomplished performance, offering power, finesse and detail.

SUGDEN MYSTRO 2010 £1,225  
Sugden's first Class AB integrated in a long time surprises; rollickingly good fun, it loses surprisingly little in smoothness to its Class AB siblings.

NAIM NAIT XS 2009 £1,250  
With much of the sound of the Supernait at half the price, this is powerful, articulate and smooth beyond class expectations.

CREEK DESTINY 2 2010 £1,445  
Beautifully voiced integrated amplifier with a distinctly seductive, cube like sound. A solid-state superstar!

SUGDEN A21A S2 2008 £1,469  
Crystalline clarity, dizzying speed and forensic detailing makes this seminal design the most nature.

ICON AUDIO PS3 2008 £1,500  
Dynamic performer that can be used on its own as a complete phono-level preamp.

LEEMA TUCANA II 2010 £3,495  
Polished high end integrated amp that combines power, detail and genuine musicality with a good range of facilities.

MUSICAL FIDELITY AMS351 2010 £6,000  
One of the best high end integrateds we've heard at or near the price.

SUGDEN IA4 2007 £3,650  
Goodly amount of Class A power; icy clarity and a breathtakingly fast, musical sound make this one of the very best super-integrateds.

QUAD II CLASSIC 2010 £4,500  
Beautiful retro styled integrated amplifier with a subtle, supple sound - although needs matching to speakers that are easy loads.

DARTZEEIL CTH-8550 2010 £16,500  
Charismatic and quirky high end solid-state integrated amplifier with superb sound and a charming visage.

HEADPHONE AMPLIFIERS

FIDELITY AUDIO HPA 100 2011 £350  
Great little headphone amplifier with a lively yet refined and open sound.

MUSICAL FIDELITY X-CAN V8 2008 £350  
Open and explicitly detailed sound plus serious bass wallop and the ability to drive anything to very high levels makes this a great partner for most mid-to-high end headphones.

SIM AUDIO MOON 600i 2010 £5,750  
Sturdy build, useful facilities and a wonderful relaxed, seamless and even-handed sound will win this many friends.

MUSICAL FIDELITY AM535i 2010 £6,000  
One of the best high end integrateds we've come across, this combines hear-through transparency with musical get-up-and-go.

HEADPHONE AMPLIFIERS

CREEK OBH-22 2008 £350  
Brilliant value budget passive, with remote control, mute and input switching, plus an easy, a neutral sound.

ICON AUDIO LA-4 2007 £800  
Uses early 6SN7 triodes for liquid sound, has plenty of gain and remote control.

NUFORCE P-9 2007 £2,700  
Impressive two box preamp with superb resolution and an engaging sound.

SIM AUDIO MOON 600i 2010 £5,750  
Sturdy build, useful facilities and a wonderful relaxed, seamless and even-handed sound will win this many friends.

MUSICAL FIDELITY X-CAN V8 2008 £350  
Open and explicitly detailed sound plus serious bass wallop and the ability to drive anything to very high levels makes this a great partner for most mid-to-high end headphones.

SIM AUDIO MOON 600i 2010 £5,750  
Sturdy build, useful facilities and a wonderful relaxed, seamless and even-handed sound will win this many friends.

MUSICAL FIDELITY AM535i 2010 £6,000  
One of the best high end integrateds we've come across, this combines hear-through transparency with musical get-up-and-go.

DARTZEEIL CTH-8550 2010 £16,500  
Charismatic and quirky high end solid-state integrated amplifier with superb sound and a charming visage.
**MUSICAL FIDELITY PRIMO**

2009 £7,900

Seriously expensive, but one listen explains why. Wonderfully exuberant sound that can only come from a top-quality tube design.

**POWER AMPLIFIERS**

**XTZ AP-100**

2010 £520

Decently smooth yet usefully muscular, this power amp punches way beyond its price point in sonics and value terms.

**QUAD 909**

2001 £900

The latest current-dumper has a smooth and expansive character with enough wallop to drive most loads. Not the most musical, but superb value all the same. Lovely build, finish and Quad's legendary service are nice.

**NUFORCE REFERENCE 9SE V2**

2006 £1,750

Brilliant value for money monoblocks with massive power and super-clean, three-dimensional sound.

**DPA SA-I**

2010 £2,850

Pacey, engaging and rhythmic almost to a fault, this solid-state power amplifier isn't the world's most powerful but is none the worse for it.

**QUAD II-40**

2005 £3,230

Modern tube monoblock power amplifiers with plenty of power, liquid and open midband and spacious, airy treble. Explicit, engaging sound, but not as euphonic as some.

**ELECTROCOMPANIET NEMO**

2009 £4,450 (EACH)

The Norwegian power station is as cool as a glacier tonally, yet impresses with its sheer physicality and clearness of focus. 600W per channel makes for a massive bang per buck.

**ICON AUDIO MB845 MkII**

2010 £5,500

With 120W from big 845 valves right down to low frequencies, this power amplifier has massive dynamics and bass swing, yet is easy on the ear.

**LOUDSPEAKERS**

**Q ACOUSTICS 2020**

2010 £140

Great little standmounters with a friendly, fun yet surprisingly refined gait. Excellent value starter speakers.

**ACOUSTIC ENERGY NEO 1**

2007 £199

Tidy and well balanced standmounters with pleasing clarity and detail.

**MISSION MX2**

2011 £200

Sophisticated sound allied with real musical insight makes these small standmounters a super value for money.

**ACOUSTIC ENERGY NEO 1 v2**

2010 £225

Civilised sounding speaker with fast and tuneful bass.

**B&W 686**

2007 £279

B&W's baby standmounters offer a sophisticated and mature performance that belies both their dimensions and price tag.

**WHARFEDALE DIAMOND 10.3**

2010 £290

Great small standmounters for audiophiles on a budget; dry punchy sound with impressive sounding at the price.

**MORDAUNT SHORT AVIANO 2**

2010 £300

Classy sounding standmounter as a still affordable price.

**KEF IQ30**

2009 £330

Beautifully built, classily styled standmounters with exceptional image projection and a very clean, detailed sound.

**USHER S-520**

2006 £350

Astonishingly capable budget standmounters that offer detail and dynamics well beyond their price and dimensions.

**XTZ 99.25**

2010 £640

Disarmingly open and refined at the price, these standmounters bring unexpected clarity and detail.

**USHER BE-718**

2007 £1,600

Quirky but adorable standmounters that are way off the pace in respect of detail and power, but well capable at playing a tune and pulling you in to the music.

**GURU QM-10P**

2007 £1,595

Serious small standmounters for audiophiles on a budget; dry punchy sound with impressive dynamics.

**USHER SBE8**

2008 £1,895

Generously large, silky smooth delivery, this dynamic sounding floorstander is an excellent allrounder.

**ISOPHON GALILEO**

2007 £2,100

Big standmounters that really grip the music and offer quite startling dynamics and grip.

**ACOUSTIC ENERGY AEI CLASSIC**

2006 £845

Brilliantly successful remake of an iconic design; not flawed, but surely one of the most musical loudspeakers ever made.

**SPENDOR S3/5E**

2007 £950

A natural successor to the BBC LS3/5a, whose impressive neutrality, imaging and even-handedness makes this a superior, if less charismatic, loudspeaker.

**MY AUDIO DESIGN MY1920**

2011 £1350

Exceptionally smooth, spacious and refined mini monitors that beguile and excite in equal measure.

**ELAC BS243**

2010 £1,000

More transparent and spacious than they've a right to be at this price, these refined mid-price standmounters represent top value.

**RRR FS100**

2007 £1,055

Mind-boggling amount of loudspeaker for the money. Big and sturdy built with serious bass and awesome soundstage scale. A real bargain.

**ONE THING AUDIO ESL57**

2007 £1,450

One Thing Audio's modifications keep the good old ESL57 at the very top of the game.

**MARTIN LOGAN SOURCE**

2008 £1,600

Brilliant entry level electrostatics, giving a taste of loudspeaker esoterica for the price of most moving coil boxes. Tremendous clarity, eveness and delicacy, although not the world's most powerful sound.

**SPENDOR SBE**

2008 £1,895

Exceptionally smooth, spacious and refined mini monitors that beguile and excite in equal measure.

**ACOUSTIC ENERGY NEO 1 v2**

2010 £225

Civilised sounding speaker with fast and tuneful bass.

**B&W 686**

2007 £279

B&W's baby standmounters offer a sophisticated and mature performance that belies both their dimensions and price tag.

**WHARFEDALE DIAMOND 10.3**

2010 £290

Great small standmounters for audiophiles on a budget; dry punchy sound with impressive image projection and a very clean, detailed sound.

**MORDAUNT SHORT AVIANO 2**

2010 £300

Classy sounding standmounter as a still affordable price.

**KEF IQ30**

2009 £330

Beautifully built, classily styled standmounters with exceptional image projection and a very clean, detailed sound.

**USHER S-520**

2006 £350

Astonishingly capable budget standmounters that offer detail and dynamics well beyond their price and dimensions.

**XTZ 99.25**

2010 £640

Disarmingly open and refined at the price, these standmounters bring unexpected clarity and detail.

**USHER BE-718**

2007 £1,600

Quirky but adorable standmounters that are way off the pace in respect of detail and power, but well capable at playing a tune and pulling you in to the music.

**GURU QM-10P**

2007 £1,595

Serious small standmounters for audiophiles on a budget; dry punchy sound with impressive dynamics.

**USHER SBE8**

2008 £1,895

Generously large, silky smooth delivery, this dynamic sounding floorstander is an excellent allrounder.
STANDARDS

MY AUDIO DESIGN
MY CLAPTON SE 2010 £3,299
Powerful, dynamic, musical yet refined, this unconventional point-source design yields dramatic sonic benefits.

MAD MY CLAPTON GRAND MM 2010 £3,599
Distinctive coaxial standmounters with wonderful soundstaging, bright lucid midband and true musical insight.

YAMAHA SOAVO 1.1 2009 £3,000
Musically transparent large floorstanders with impressive dynamics and cohesion. Excellent build and finish.

MOWGAN AUDIO MABON 2007 £3,995
Massively capable loudspeakers that offer dynamics, scale and clarity in an elegantly simple package. Wide range of finishes, too.

B&O BEOLAB 9 2007 £5,000
Technically impressive and visually striking loudspeakers with sound quality that more than matches their looks.

TANNOY DEFINITION DC10T 2010 £5,000
Wonderfully wide and open, super fast and amazingly engaging to listen to.

ECLIPSE TD712z/2 2011 £5,100
Flawed genius, and wilfully so. These loudspeakers don’t do everything well, but what they can do is profound and enthralling; rhythms, dynamics and soundstaging.

ARS AURES MI 2006 £5,995
Sublime build and finish allied to an insightful, assured and even-handed musical performance makes these an essential high end audition.

REVOLVER CYGNIS 2006 £5,999
Revolver pull out all the stops and show what they can do with this magnificent flagship loudspeaker. A superb monitor that is like a mini B&W 801D in many ways.

VIVID V1.5 2010 £6,000
Breathtaking transparency, superlative coherence and dizzying speed make these one of the best standmounters ever made - providing you like their ‘studio sound’.

GERMAN PHYSIKS LIMITED II 2011 £7,800
Don’t be fooled by the austere looks; this is a superbly enjoyable omnidirectional speaker with a wonderfully fast, expansive sound.

USHER BE-10 2009 £10,500
Clever high end moving coil design with immense speed and dizzying clarity allied to epic punch. Needs the best ancillaries to fly, though...

B&W 801D 2006 £18,500
In many respects, the ultimate studio monitor; dazzling clarity and speed with commanding scale and dynamics.

GOLDRING DRISO 2006 £70
Wonderfully fast, expansive sound. Simply the best headphones we’ve ever heard.

ISOTEK AQUARIUS 2010 £795
Highly accomplished premium priced mains conditioner that delivers the sonic goods.

MARTIN LOGAN CLX LINEAR 2010 £15,990
Meticulously crafted electrostatic that’s free from traditional limitations, this is one of the very best loudspeakers money can buy.

HEADPHONES

JAYS V-JAYS 2010 £49
Wonderful little budget on-ear portable phones with a clean, smooth sound to beat the best of the rest at the price.

SENHEISER MX-550 2005 £19
Our unqualified recommendation for those seeking a serious sounding pair of in-ear phones. Smooth, detailed and musical.

SENHEISER PX-100 2002 £29
Cracking pair of lightweight open back cans ideal for personals, but good enough for real hi-fi use. Superb build allied to a smooth and engaging performance make them the spiritual successor to the HD400s.

TOWNSEND MAXIMUM 2003 £800
Classy ribbon superspeaker with flexible level settings and cool styling - you’ll be amazed at the difference it makes, especially with Quad electrostatics.

ACCESSORIES

WADIA 1701 2010 £349
The first iPod dock to extract the music digitally, letting you hook your little Apple direct to a DAC for superior sound.

STAX SR-007T OMEGA
Simply the best headphones we’ve ever heard at any price, these sweetly translucent electrostatic earphones are like no other head- phone, or loudspeaker for that matter.
**INTERCONNECTS**

**TELLURIUM Q BLACK**
2010 £376/3m
A deep, dark, velvety performer that’s nevertheless highly musical. It represents excellent value as mid-price cables go.

**TECHLINK WIRES XS**
2007 £20
Highly accomplished interconnects at an absurdly low price. Stunning value for money.

**WIREWORLD OASIS S**
2003 £69/M
Excellent mid-price design with a very neutral, silky and self-effacing sound. Superb value for money.

**CHORD COMPANY CHAMELEON 2**
£90/M
One of our favourites, these are musical performers with a smooth yet open sound.

**DNM RESON XS**
2002 £40/M
Neutral and transparent - a steal!

**VDH ULTIMATE THE FIRST**
2004 £260/0.6m
Carbon interconnects that help you forget the electronics and concentrate on the music. Miraculous transparency. Tight and tuneful bass mixed with air and space results in a cracking cable for the money.

**TCI CONSTRICCTOR 13A-6 BLOCK**
2003 £120
Top quality ‘affordable mains outlet block, with fine build and good sonics. Well worth the extra over standard high street specials, which sound coarse and two-dimensional by comparison.

**MISSING LINK CRYO REFERENCE**
2008 £375
Currently our favourite ‘affordable high end’ interconnects, with a deliciously smooth, open and subtle sound without a hint of edge or grain. Superb value, in as much as it’s as good as some designs at three times the price.

**TUNERS**

**DENON TU-1500AE**
2006 £120
Excellent entry level analogue tuner; slick sonics and fine feature count make it a bargain.

**CAMBRIDGE AUDIO 640T**
2005 £250
Sweet sounding digital/analogue hybrid with fine build and finish at the price.

**ARCAM FMJ T32**
2009 £550
Excellent hybrid FM/DAB+ tuner with a smooth, engaging sound. Factor in its fine build and it’s a super value package.

**CREEK CLASSIC TUNER**
2006 £550
No tuner offers better sound per pound, wonderfully three dimensional and smooth from bottom to top.

**MICROMEGA FM-10**
2010 £750
Don’t let the modest proportions fool you, this is a state-of-the-art modern analogue tuner with bespoke internals giving a warm, expansive sound.

**MYRYAD MXT-3000**
2005 £800
Surprising sound and excellent build is all most will ever need in a tuner; superb.

**MAGNUM DYNALAB MD-90T**
2010 £1,295
Exceptionally able, but commensurately priced, audiophile tuner that cannot fail to charm.

**MAGNUM DYNALAB MD-100T**
2006 £1,895
One of the best ways to hear FM that we know; superbly open and musical sound in a quirky but characterful package.

**SYSTEMS**

**YAMAHA CRX-M170**
2007 £200
One heck of a lot of quality performance on DAB, CD and FM for £200! Optional matching £120 NX-E300 loudspeakers aren’t too shabby either.

**TEAC DR-H300DAB**
2008 £329
Nicely built and styled mini with fine performance on all sources that even plays DVDs!

**MAGNA DYNALAB MD-100T**
2006 £1,895
Great little half width one-box system with truly impressive sound ailed to a wealth of source options.

**MAGNUM DYNALAB**
2006 £1,895
Excellent hybrid FM/DAB+ tuner with a smooth, engaging sound. Factor in its fine build and it’s a super value package.

**PEACHTREE AUDIO IDECCO**
£1,000
Excellent sounding iPod dock, impressive DAC and fine amplifier section make this an excellent one box style system.

**ARCAM SOLO**
2005 £1,249
Excellent all-in-one system, with a warm, smooth and balanced sound to match the features and style.

**LINN CLASSIK MUSIC**
2008 £1,350
Neat update of the original and best one-box stereo system; superbly musical sound beats equivalently priced separates.

**NAIM UNITIQUE**
2010 £1,350
Great little half width one-box system with truly impressive sound ailed to a wealth of source options.

**LINN CLASSIK MOVIE**
2007 £2,350
Superbly built all-in-one that offers excellent sound across all formats and is surprisingly easy to use.

**LINN CLASSIK MOVIE**
2007 £2,350
Superbly built all-in-one that offers excellent sound across all formats and is surprisingly easy to use.

**MERIDIAN F80**
2007 £1,500
Fantastically built and versatile DVD/CD/DAB/FM/M/A/M unit, designed in conjunction with Ferrari. Ignore nay-sayers who sneer that it isn’t a ‘proper’ hi-fi product; most see sense when they listen to it...

**MERIDIAN SOOLOOS 2.1**
2010 £6,990
Thanks to its crisp styling and bright, colourfull touchscreen, plus excellent search facilities this is one hard disk music system with a difference. Best partnered to Meridian active loudspeakers.

**MARANTZ ‘LEGEND’**
2007 £22,000
The combination of SA-751 disc player, SC-752 preamp and MA-952 monoblocks delivers jaw-dropping performance.
Sometimes, a plan comes together in the most unusual of ways. Take Audio Analogue which was planning to release a tuner and USB/DAC as separate units until it realised that merging the two within one box would save money and space. “This idea was further confirmed,” said Audio Analogue Luca Podestà, “during the design stage. We saw that it was possible to isolate the specific circuits of the two different units so that, from an electronic point of view, there would be only one function (i.e. tuner or USB/DAC) active at a time”.

Podestà is very proud of the Cherubini VT but also likes the unique niche that it has found for itself in the market. “There are no products like the Cherubini VT around” he said. “There are tuners or USB/DACs. There are not so many tuners within the higher-end portion of the market either, which means that audiophiles often have to buy products that don’t match their audio system both from a design and sound point of view.”

Podestà was also eager to anticipate reports of his USB-DAC’s lack of technical read-outs. Audio Analogue has produced a USB/DAC for the plug-and-play user who just wants to listen to their music — someone who isn’t really interested in sample frequencies and the like.

Spanning 444x360x83mm, arriving in either silver or black and weighing in at a reasonable 6.4kg, the Cherubini VT chassis is constructed with a wide slab of frontal aluminium surrounded by 3mm of the same and with a steel base.

It's important to remind ourselves that the Cherubini VT has been designed to feature two different types of equipment within the same chassis. Therefore, the front panel controls have different functions depending on the mode: tuner or USB/DAC, this is indicated by the LED screen. As such, a large, rotatable knob manages the frequency search in tuner mode while pressing the knob causes the unit to switch between tuner and USB/DAC modes. Further extended pressure can be used to enter/exit the standby mode.

Controls are pretty standard on the front fascia including station scanning, mono/stereo, memory and AM/FM modes for the tuner. I was a little disappointed in the tuner...
"Cherubini VT proved to be not only enjoyable but wholly addictive"

scanning mode, which confirmed our measured sensitivity results. The Cherubini VT only picked one or two stations for examination. Manual tuning did, however, reveal more stations with a good or reasonable signal response. The manual tuning knob was not particularly responsive either. I would have welcomed a finger indentation on the knob for faster manual tuning while the LED read-out was rather small.

To avoid cross contamination, both tuner and USB/DAC have been separated internally. "Hence, the USB/DAC circuits are not supplied with electricity when the unit is in tuner mode and vice versa," said Luca Podesta. "Also when the unit is working in tuner mode, the PC/MAC is disconnected from the unit."

To aid all of this, the tuner section has been situated within a metal box to shield from RF interference and a special buffer stage has been put between the tuner section and the output stage to further decrease and filter any RF noise.

"The analogue output stage is the same for both modes. It is composed of an Op Amp stage followed by a vacuum tube output stage configured as a buffer. The OpAmp stage is a second order Bessel low pass filter. When the unit is working as a USB/DAC it filters out the noise coming from the DAC. When working in tuner mode, it filters out spurious noise coming from the RF signal demodulation. The power supply is based on a toroidal transformer and each section has its own voltage regulator stage."

The Cherubini VT sits within a difficult price point: sitting uncomfortably between budget and mid-price and, hence, is under threat from top performing budget equipment. I decided to pitch it against the budget Cambridge Azur 651A amplifier which has an effective USB/DAC of its own alongside my budget reference tuner, a venerable Sony ST-S261.

**SOUND QUALITY**

Launching into the Cherubini VT’s USB/DAC and playing a WAV version of Carol Kidd’s 'It Never Entered My Mind', ripped using the highly recommended Exact Audio Copy software (downloadable free from www.exactaudiocopy.de), the higher quality components used in the Cherubini VT really told. Here, at least, you really do get what you pay for. On this well recorded album, the instrumental presentation had a more realistic and natural demeanour than the Cambridge, with double bass having a more springy thump along with the piano's better expressed, multi-timbral qualities. Kidd's vocal performance was clear although, at times, the Cherubini VT did express...
The Model M2-12R precision pick-up arm is an extension of our popular Series M2 range offering optimum cartridge choice with minimal tracking error and harmonic distortion associated with a 12 inch arm.

Providing classic looks and meticulous build quality, this arm offers all the most important features; traditional 'J' shaped tone-arm, detachable S2-R aluminium headshell with azimuth adjustment, two stage tungsten counterbalance system, superb quality ball race bearings and a level of rigidity to suit all types of cartridge.
itself in a slightly clinical manner. Kidd's natural warmth of emotion did cool a touch, almost as if she was singing in a bad mood.

A slight lifting of the upper mids had a positive effect on the treble, giving it an extra flourish within cymbal playback which also shimmered with reverb elements.

Moving to the more upbeat, but highly compressed, 'Stronger' from the Sugababes positioned the Audio Analogue in a wholly different light. Firstly, there was a distinct low frequency warmth emanating from the DAC or valve. Bass could even be accused of being a little underwhelming and soft, which removed some of the impact from this track. The accompanying valve integration may have had a hand in that but it may have also been behind the broad brushed confidence within the lower spectrum that gave the track a wholesome, full atmosphere.

Moving towards the upper frequencies, I was frankly expecting more from the midrange and treble but, while extra information was noted in comparison with the Cambridge, the Cherubini VT didn't really dig into the mix to reveal anything truly startling, barring some of the jazz percussionist's energy R&B and it seems a little reductive. Present it with classical and jazz and the Cherubini VT will manage to touch both your heart and soul. With these genres of music, in both USB/DAC and tuner modes, the Audio Analogue Cherubini VT proved to be not only enjoyable but wholly addictive. So it is a fine product, albeit one that will suit some more than others.

CONCLUSION

This is a specialist unit, that there is no doubt. Give it rock and high energy R&B and it seems a little reticent. Present it with classical and jazz and the Cherubini VT will manage to touch both your heart and soul. With these genres of music, in both USB/DAC and tuner modes, the Audio Analogue Cherubini VT proved to be not only enjoyable but wholly addictive. So it is a fine product, albeit one that will suit some more than others.

MEASURED PERFORMANCE

Our frequency response analysis shows a slow treble roll down toward high frequencies, enough to give the Cherubini tuner a soft, easy sound balance. The peak up at 12kHz will have little effect, adding in some upper treble. This characteristic is due to the mpx filter termination mismatching and is quite common in VHF tuners. The filter notches out pilot tone at 19kHz and pilot measured -74dB down on the Cherubini. There was some bass roll off too, so bass may lack a little weight. In all the Cherubini should sound easy on the ear and helping toward this were low distortion figures, just 0.13% at full modulation, in stereo.

Hiss was fairly well suppressed, measuring -56dB on stereo at full quieting, a fairly typical result as modern tuners go. Full quieting was reached with 0.95mV across the aerial terminals (p.d.), as usual with VHF/FM. Sensitivity was on the low side, 85µV pd being needed for -50dB hiss on stereo and 15µV on mono. Output was satisfactorily high at 0.7V.

For a 6dB full scale signal into USB the Cherubini delivered a healthy 1.7V out and frequency response was flat to 18kHz. Distortion was low at 6dB (0.11%) but high at -60dB, measuring 0.5%, typical of a budget DAC. This is not a high quality USB solution. Noise measured -91dB.

The Cherubini has a good, if not exceptional VHF/FM tuner allied to a USB convertor that fares well in measured terms, but is not up with the best. NK

FVHF/FM Frequency response 35Hz-4kHz Stereo separation 41dB Distortion (50% mod.) 0.13% Hiss (CCIR) -57dB Signal for minimum hiss 0.95mV Sensitivity mono 15µV stereo 85µV

Output 0.7V

FREQUENCY RESPONSE
The vinyl market is alive and well in 2012, and we at Henley Designs are proud to offer some of the world's finest and most meticulously designed record players and phono accessories to this flourishing UK scene. Like the Roksan Radius 5.2 (above); a turntable built on the knowledge gained from years of ground-breaking research and extensive listening tests. The award-winning 5.2 utilises a new high-tolerance main bearing, upgraded decoupling and motor suspension mounts, and a custom made silicon drive belt. On top of this, premium features such as the stainless steel feet with silicone coupling, beautiful high-quality finishes and improved Nima tonearm with upgraded cabling are also included to help make a turntable worthy of any serious audiophile's Hi-Fi system.

Everything we sell at Henley Designs comes from a rich heritage of analogue excellence, and we pride ourselves on offering you the best possible advice and after-sales support, online and over the phone.
**Turntables**

**Xperience Basic+**
The most affordable turntable package for the hugely popular 2 Xperience Turntable.
- Glass Black Finish
- Brand New Uni-Pivot Tonearm
- Pro-Ject Pick-IT Cartridge Pre-Fitted
- Spiked Feet

**Pro-Ject RPM 10.1**
Extensive testing and years of experience combined to create this monster of a turntable.
- Superlative Anti-Vibration Technologies
- Ground-IT Deluxe Supplied
- 10CC Evolution Arm

**Roksan Xerxes 20+**
A true icon of high-end Hi-Fi. So impressive, it will never need to be replaced.
- High-Quality Construction
- Beautiful Finishes
- Arm Board Options
- Smooth Performance

**Pro-Ject Debut S/E3**
Special Edition version of the world-famous Debut turntable; the ultimate in affordable
- Improved Motor Suspension
- 12" Platter
- Gloss Black Finish
- Ortofon OM 10 Super Pre-Fitted

**Pro-Ject Xpression III**
Latest incarnation of the original Pro-Ject 1 turntable. An improvement on the Mk II model.
- Stylish Anthracite Finish
- Acrylic Platter
- 8.6C Tonearm
- Ortofon 2m Red Pre-Fitted

**Ortofon 2m**
The new standard in moving-magnet cartridges.
- Along with a unique styling, the 2m Series boasts numerous technological advances and better stylus cuts than all that came before them.

**Ortofon Cadenza**
An award-winning, high-end series of Moving-Coil cartridges that replaced the extremely popular MC Jubilee and Kontrapunkt models. All-new processes now combine to make a market-leading range.

**Phono Stages and Accessories**

**Pro-Ject Phono Box S**
Brand new phono pre-amp inspired by the world's most popular budget phono stage - the Phono Box. This S version combines great sound and features for MM & MC cartridges at an attractive price.

**Lehmann Black Cube Decade**
Lehmann Audio equipment is made for music enthusiasts, by music enthusiasts. The Black Cube Decade was designed as a celebration of the cult Black Cube phono stage's enduring success in 2005.

**Ortofon TA-110 Tonearm**
Stylish arm with innovative internal damping, for a more solid performance than its predecessor.
- 9" Arm
- S-Shape Design
- Easy to Set-Up
- Supplied with Headshell and Arm Wire

**Accessories**
We keep in stock an impressive catalogue of accessories and spare parts; from the Spin Clean Record Washer System to replacement Power Supplies. See our website for more information.

**Visit us Online**

**Brand New Website!**
We are delighted to announce the launch of our new website. With extensive information on all of our products and brands, a detailed 'Where to Buy' section offering informative listings of all our recommended resellers, a 'Help & Advice' section covering product-specific and general Hi-Fi topics, and an all-new Shop; 2012 will see henleydesigns.co.uk turn into the ultimate Hi-Fi portal.

Visit us now: www.henleydesigns.co.uk
Here is our list of the great and good from audio’s glorious past, products that have earned their place in hi-fi history. You’ll also see some oddities which aren’t classic as such, but are great used buys. The year of introduction is given, alongside the original UK launch price.

**CLASSICS**

**DIGITAL**

<table>
<thead>
<tr>
<th>Product</th>
<th>Year</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAMBRIDGE AUDIO CD1</td>
<td>1986</td>
<td>£1550</td>
</tr>
<tr>
<td>Inspired Stan Curtis redesign of Philips CD104, complete with switchable digital filter. Lean but tight and musical performer.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NAIM CDS</td>
<td>1990</td>
<td>£N/A</td>
</tr>
<tr>
<td>Classic Philips 16x4 chipset with serious attention to power supplies equals grin-inducing sonics.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESOTERIC PD</td>
<td>1997</td>
<td>£8,000</td>
</tr>
<tr>
<td>The best CD drive bar none; TEAC’s Tokyo boys pushed the boat out in style. Brillantaly incisive, ridiculously over engineered.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CAMBRIDGE AUDIO CD45E**

<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>£300</td>
</tr>
<tr>
<td>A touch soft in the treble and tonally light, but outstanding in every other respect.</td>
<td></td>
</tr>
</tbody>
</table>

**LINN KARIK III**

<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>£1775</td>
</tr>
<tr>
<td>The final Karik was a gem. Superb transport gives a brilliantly tight, grippy dynamic sound, albeit tonally dry.</td>
<td></td>
</tr>
</tbody>
</table>

**MARANTZ CD73**

<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1983</td>
<td>£700</td>
</tr>
<tr>
<td>A riot of gold brushed aluminium and LEDs, this distinctive machine squeezed every last ounce from its 16x4 DAC – super musical</td>
<td></td>
</tr>
</tbody>
</table>

**MARANTZ SA-1**

<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>£5,000</td>
</tr>
<tr>
<td>The greatest argument for SACDA This sublime Ken Ishiwata design is utterly musically convincing with both CD and SACD, beating most audiophile CD spinners hands down.</td>
<td></td>
</tr>
</tbody>
</table>

**MERIDIAN 207**

<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988</td>
<td>£995</td>
</tr>
<tr>
<td>Beautifully-built two-box with pre-amp stage. Very musical although not as refined as modern Biosteam gear. No digital output.</td>
<td></td>
</tr>
</tbody>
</table>

**MUSICAL FIDELITY TRIVISTA**

<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>£4000</td>
</tr>
<tr>
<td>When playing SACDs, the sweetest, most lucid and lyrical digital disc spinner we’ve heard. Old school stereo, pure DSD design. CD sound is up in the £1000 class, too! Future classic.</td>
<td></td>
</tr>
</tbody>
</table>

**SONY CDP-101**

<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982</td>
<td>£600</td>
</tr>
<tr>
<td>The first Japanese CD spinner was powerful and involving. Brilliant transport more than compensated for 16x2 DAC, and you even got remote control!</td>
<td></td>
</tr>
</tbody>
</table>

**SONY CDP-RI/DAS-RI1987 £3,000**

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sony's first two boxer was right first time. Tonally lean, but probably the most detailed and architectural sounding machine of the eighties.</td>
</tr>
</tbody>
</table>

**SONY CDP-701ES**

<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984</td>
<td>£990</td>
</tr>
<tr>
<td>Sony's first ever bespoke high end audiophile machine used a 16x2 DAC to provide a clinically incisive sound; supreme build quality allied to the pure unadulterated luxury of a paperback-sized remote control.</td>
<td></td>
</tr>
</tbody>
</table>

**TECHNICS SL-P1200**

<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987</td>
<td>£800</td>
</tr>
<tr>
<td>CD version of the Technics SL-1200 turntable. Massively built to withstand the rigours of 'pro' use and laden with facilities - a great eighties icon. Sonically, it's pure fun, with hefty bass that can still show weedy modern players a thing or two!</td>
<td></td>
</tr>
</tbody>
</table>

**TEAC VRDS-TI**

<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>£600</td>
</tr>
<tr>
<td>Warm and expansive sound made this a mid price hit. Well built, with a slick mech.</td>
<td></td>
</tr>
</tbody>
</table>

**SONY CDP-RI**

<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987</td>
<td>£3,000</td>
</tr>
<tr>
<td>Sony's first two boxer was right first time. Tonally lean, but probably the most detailed and architectural sounding machine of the eighties.</td>
<td></td>
</tr>
</tbody>
</table>

**TEAC VRDS-TI**

<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>£600</td>
</tr>
<tr>
<td>Warm and expansive sound made this a mid price hit. Well built, with a slick mech.</td>
<td></td>
</tr>
</tbody>
</table>

**YAMAHA CD-XI**

<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>£340</td>
</tr>
<tr>
<td>Nicely built 16x2 machine with a very sharp and detailed sound; sometimes too much so. Excellent ergonomics; unlike almost every other rival of the time.</td>
<td></td>
</tr>
</tbody>
</table>

**TEAC VRDS-TI**

<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>£600</td>
</tr>
<tr>
<td>Warm and expansive sound made this a mid price hit. Well built, with a slick mech.</td>
<td></td>
</tr>
</tbody>
</table>

**QED DIGIT**

<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>£90</td>
</tr>
<tr>
<td>Budget bitstream performer with tweaks aplenty; Positron PSU upgrade makes it smooth, but now past it.</td>
<td></td>
</tr>
</tbody>
</table>

**We do not sell these products. It is for your information only.**
**TURNTABLES**

Ariston RD115 1972 £94
Modern evolution of Thorens' original belt drive paradigm, Scotland's original super-deck was warm and musical, albeit soft. Still capable of fine results today.

ADC Accutrac 4000 1976 £300
Bonkers 1970s direct drive that uses an infra red beam to allow track selection and programming. More of a visual and operational delight than a sonic slinger.

Pioneer PL12D 1973 £36
The beginning of the end for the British turntable industry. When vinyl was the leading source, this brought new standards of noise performance and stability to the class, plus a low fricton S-shaped tonearm. Later PL12D was off the pace compared to rivals.

Pioneer PL-590 1976 £600
Sturdy and competent motor unit that performs well with a wide range of tonearms. Check very thoroughly before buying due to occasional defects. Clean and musical, albeit lacking involvement.

Dual CS505 1982 £75
Simple high quality engineering and a respectable low mass tonearm made for a brilliant budget buy. Polished, smooth and slightly bland sound.

Goldring Lenco GL75 1970 £15.65
Simple, well engineered motor unit with soft, sweet sound and reasonable tonearm. Good spares and servicing support even today from specialists. Eminently tweakable. Similar 88 and 99 motor units are budget 301T/124 rivals.

Linn Axis 1987 £253
Simplified cut-price version of the Sondek complete with LVX arm. Elegant and decently performing mid-price package. Later version with Akito tonearm better.

Linn Sondek LP12 1973 £86
For many, the Brit superdeck; constant mods meant that early ones sound warmer and more lyrical than modern versions. Recent 'SE' mods have brought it into the 21st century, albeit at a price.

Marantz TT1000 1978 £N/A
Beautiful seventies high end belt drive with sweet and clean sound. Rare in Europe, but big in Japan.

**MID-PRICED DECKS**

Michell Gyrodec 1981 £599
Thanks to its stunning visuals, this bold design didn't accord the respect it deserved until recently. Early examples sound cold and mechanical, but now right on the pace. Clean, solid and architectural sound.

Technics SP10 1973 £400
Semi-Luxury Japanese engineering. Sonics depend on plinths, but a well mounted SP10/11 will give any modern a hard time, especially in respect of bass power and midband accuracy.

Rega Planar 3 1978 £79
Brilliantly simple but clean and musical performer, complete with Acos-derived 5-shaped tonearm. 1983 saw the arrival of the RB300, which added detail at the expense of warmth. Superb budget budget buy.

Garrard 301/401 1953 £19
Heavy metal - tremendously strong and articulate with only a weedy treble to let it down. In many respects, better than the seventies 'superdecks' that succeeded it.

Roksan Xerxes 1984 £550
Supposedly the first to 'better' the LP12. Super tight and clean sound, with excellent transients. Less musical than the Sondek, but more neutral. Sagging plinth top-plates make them a dubious used buy.

Sony PS-B80 1978 £300
First outing for Sony's impressive 'Biotracer' electronic tonearm. Built like a tank with a clean and tidy sound, albeit lacking involvement. Scarily complicated and with no spares support - buy with caution!

Thorens TD124 1959 £N/A
The template for virtually every 1970s 'superdeck', this iconic design was the only real competition for Garrard's 301. It was sweeter and more lyrical, yet lighter and less impactful in the bass.

Trowshend Rock 1979 £N/A
The product of academic research by the Cranfield Institute, this novel machine has an extremely clean and fluid sound. Substantially modified through the years, and capable of superb results ever since.

Trio Lo-7D 1976 £600
The best 'all-in-one' turntable package ever made, Trio/Kenwood threw their 'engineering best practice' book at this one with startling results. Clean, powerful and three-dimensional sound; ultimately limited by the tonearm.

Townshend Rock 1979 £N/A
The product of academic research by the Cranfield Institute, this novel machine has an extremely clean and fluid sound. Substantially modified through the years, and capable of superb results ever since.

Hoccott GH228 1976 £46
Evergreen unipivot with lovely sweet, fluid sound. Excellent service backup.

**TONEARMS**

Acos Lustre GST-1 1975 £46
The archetypal S-shaped seventies arm; good, propulsive and involving sound in its day, but ragged and undynamic now.

Audio Technica AT1120 1978 £75
Fine finish can't compensate for this ultra low mass arm's limited sonics - a good starter arm if you've only got a few quid to spend.

**CLASSICS**

Alphason HR100S 1981 £150
First class arm, practically up to present-day standards. Buy carefully, though, as there is no service available now. Totally under priced when new, exceptional.

Sme 3009 1959 £15
Once state of the art, but long since bettered. Musical enough, but weak at frequency extremes and veiled in the midband. Legendary serviceability and stunning build has made it a cult, used prices unjustifiably high.

Grace G707 1974 £58
This early Japanese example of the tonearm art has a smooth, lyrical sound. Imported by Linn, fitted to early LP12s. Sonically way off the pace now, though.

Rega RB300 1983 £88
Inspired budget esoterica. Detailed, tight, neutral sound but tonally grey sounding in absolute terms. Responds well to tweaking, and its cheaper RB250 brother better still.

Sme Series III 1979 £113
Clever variable mass design complete with Titanium Nitride tube tried to be all things to all men, and failed. Charming nonetheless, with a warm and inoffensive sound.

Haddock GH228 1976 £46
Evergreen unipivot with lovely sweet, fluid sound. Excellent service backup.
TECHNICS EPA-501 1979 £ N/A
Popular partner for late seventies Technics motor units. Nice build and Titanium Nitride tube can't compensate for muddling sound.

INTEGRATED AMPLIFIERS/COMBOS

DELTEC 1987 £1900
Fast, dry and with excellent transients, this first DPA integrated is the real deal for eighties obsessives. Ridically punchy 80W per channel from a tiny, half-size box. Radical, cool and more than a little strange.

ROGERS A75 1978 £220
The prototypical Audiolab 8000a — lots of sensible facilities, a goodly power output and nice sound in one box. The later A7511 and A100 versions offered improved sonics and were seriously sweet and open to listen to.

EXPOSURE VI/VIII 1985 £625
Seminal mid-eighties Exposure pre-power, offering most of what rival Naim amps did with just that little bit extra smoothness and sweetness. Still, it's by no means 'sweet' by today's standards, being lean, punchy, musical. It's also possessed of that quintessentially eighties look — frumpy black steel boxes with rough silk screened logos!

MCINTOSH MA8800 1995 £3735
Effortlessly sweet, strong and powerful with seminal styling to match.

SUGDEN A21 1969 £ N/A
Class A transistor integrated with an eminently likeable smoothness and musicality. Limited inputs via DIN sockets.

MISSION CYRUS 2 1984 £299
Classic eighties minimalism combines arrest-ing styling with clean, open, lively sound. Further upgradeable with PSX power supply.

MUSIICAL FIDELITY A11985 £350
Beguiling Class A integrated with exquisite styling. Questionable reliability.

NAIM NAIT 1984 £330
Superb rhythms and dynamics make it truly musical, but tonally monochromatic. Fine phono stage, very low power.

NAD 3020 1979 £69
Brilliantly smooth, sweet and punchy at the price and even has a better phono stage than you'd expect. The archetypal budget super-amp.

ROGERS CADET III 1965 £34
Sweet sounding valve integrated, uses ECL86 output valves, even has a half useable phono stage, sweet, warm a good introduction to valves.

CREEK CAS4040 1983 £150
More musical than any budget amp before it; CAS4140 loses tone controls, gains grip.

AUDIO LAB 8000A 1985 £495
Smooth integrated with clean MM/MC phono stage and huge feature count. Extremely reliable, too. Post '93 versions a top used buy.

MCINTOSH MA8800 1995 £3735
Effortlessly sweet, strong and powerful with seminal styling to match.

SUGDEN A21 1969 £ N/A
Class A transistor integrated with an eminently likeable smoothness and musicality. Limited inputs via DIN sockets.

MISSION CYRUS 2 1984 £299
Classic eighties minimalism combines arrest-ing styling with clean, open, lively sound. Further upgradeable with PSX power supply.

MUSIICAL FIDELITY A11985 £350
Beguiling Class A integrated with exquisite styling. Questionable reliability.

NAIM NAIT 1984 £330
Superb rhythms and dynamics make it truly musical, but tonally monochromatic. Fine phono stage, very low power.

NAD 3020 1979 £69
Brilliantly smooth, sweet and punchy at the price and even has a better phono stage than you'd expect. The archetypal budget super-amp.

ROGERS CADET III 1965 £34
Sweet sounding valve integrated, uses ECL86 output valves, even has a half useable phono stage, sweet, warm a good introduction to valves.

CREEK CAS4040 1983 £150
More musical than any budget amp before it; CAS4140 loses tone controls, gains grip.

AUDIO LAB 8000A 1985 £495
Smooth integrated with clean MM/MC phono stage and huge feature count. Extremely reliable, too. Post '93 versions a top used buy.

MCINTOSH MA8800 1995 £3735
Effortlessly sweet, strong and powerful with seminal styling to match.

SUGDEN A21 1969 £ N/A
Class A transistor integrated with an eminently likeable smoothness and musicality. Limited inputs via DIN sockets.

MISSION CYRUS 2 1984 £299
Classic eighties minimalism combines arrest-ing styling with clean, open, lively sound. Further upgradeable with PSX power supply.

MUSIICAL FIDELITY A11985 £350
Beguiling Class A integrated with exquisite styling. Questionable reliability.

NAIM NAIT 1984 £330
Superb rhythms and dynamics make it truly musical, but tonally monochromatic. Fine phono stage, very low power.

NAD 3020 1979 £69
Brilliantly smooth, sweet and punchy at the price and even has a better phono stage than you'd expect. The archetypal budget super-amp.

ROGERS CADET III 1965 £34
Sweet sounding valve integrated, uses ECL86 output valves, even has a half useable phono stage, sweet, warm a good introduction to valves.

CREEK CAS4040 1983 £150
More musical than any budget amp before it; CAS4140 loses tone controls, gains grip.

AUDIO LAB 8000A 1985 £495
Smooth integrated with clean MM/MC phono stage and huge feature count. Extremely reliable, too. Post '93 versions a top used buy.
LEAK STEREO 60 1958 £N/A

Leak's biggest valve power amp offers 35 Watts per channel and more low end welly than the smaller Stereo 20. Despite concerns over reliability their rarity means high prices are the order of the day.

LECSON API 1973 £N/A

Madcap cylindrical styling alluded to its 'tower of power' pretensions, but it wasn't. Poor build, but decently clean sounding when working.

MARANTZ MODEL 9 1997 £8000

Authentic reproduction monoblocics still more than the smaller Stereo 20. Despite concerns of power' pretensions, but it wasn't. Poor build, but decently clean sounding when working.

MICHELL ALECTO 1997 £1989

Crisp, clean and beautifully controlled with gorgeous styling. Partnered with the £1650 Orca this sounds delicious!

LEAK POINT ONE, TL10, TL12.1, TL12 PLUS 1949 £28

Early classics that are getting expensive. Overhauling is the rage before use, using original parts if possible. Surprisingly crisp and musical sound, that's far more modern than Quad IIs. Deeply impressive when in fine fettle.

MUSICAL FIDELITY XA200 1996 £1000PR

200W of sweet smooth transistor stomp in a grooved tube! Under-rated oddity.

QUAD II 1952 £22

The all-time classic valve amplifier, with a deliciously fluid and lyrical voice. In other respects, though, it sounds hopelessly dated. Low power and hard to partner properly.

QUAD 405 1978 £115

The first of the current dumpers is a capable design with smooth, effortless power and a decently musical sound. £60 and £707 continue the theme with greater detail and incision.

QUAD 303 1968 £55

Bullet proof build, but woolly sounding. Off the pace, but endearing nonetheless. Some pipe smoking slipper wearers swear by them!

KRELL KMA100 II 1987 £5,750

Ludicrous monoblock version of the giant KSA-100 is one of the seminal eighties transistor power amplifiers. Massive wallops allied to a very clean and open Class A sound makes this one of the best amplifiers of its type, ever.

RADFORD STA25 RENAISSANCE 1986 £977

At the time, very possibly the least cool amplifier on the planet – and we're not talking heat dissipation here. This reworking of Radford's original late sixties design was possessed of a wonderfully rich, old school valve sound with enough power (25W) and lots of subtlety.

NAIM NAT03 1993 £959

The warm, atmospheric sound is further proof of Naim's proficiency with tuners.

PIONEER TX-9500 1976 £295

Another of the serious classic solid-staters. Boasts the usual high end jap package of fine sound, brilliant sensitivity and superb build.

LEAK TROUGHLINE 1956 £25

Series I an interesting ornament but limited to 88-100MHz only. II and III are arguably the best-sounding tuners ever. Adaptation for stereo easy via phono multiplex socket. Fed to a modern outboard decoder they're deliciously lucid with true dimensionality.

MUSICAL FIDELITY CREEK OBH-8 SE 1996 £180

Punchy, rhythmic character with oodles of detail makes this a great budget audiophile classic. Partner with a Goldring G1042 for an unbeatable budget combination.

PHONO STAGES

CREASE CAS1140 1985 £199

Excellent detail, separation and dynamics - brilliantly musical at the price. T40 continued the theme...

NAD 4040 1979 £79

Tremendously smooth and natural sound allied to low prices and good availability make this budget analogue esoterica. Needs a good antenna to work properly, however.

YAMAHA CT7000 1977 £444

Reputedly the best of the classic jap analogues, this combines sleek ergonomics, high sensitivity and an explicit, detailed sound.

REVOX B740 1975 £520

More of a semi-pro machine than a domestic bit of kit, the Revox offers superlative measured performance although the sound isn't quite as staggering as the numbers. Fine nonetheless, and surely the most durable tuner here?

NAD 4140 1995 £199

Brilliant affordable digital tuner has a smooth, detailed musical sound plus sensible real-world facilities.

ROGERS T75 1977 £125

Superb mid-price British audiophile design, complete with understated black fascia. Fine sound in the true Rogers mould – smooth and sweet with fine dimensionality.

SAMSUI TU-9900 1976 £300

A flagship japan tuner designed to steal sales from the likes of Acrophase and Revox, it boasts superlative RF performance and an extremely smooth and lucid sound, along with very fine build and finish.

SONY ST-5950 1977 £222

One of the first Dolby FM-equipped tuners, a format that came to nought. Still, it was Sony's most expensive tuner to date, and boasted a very good sound quality allied to brilliant ergonomics.

SEQUERRA MODEL 1 1973 £1300

Possibly the ultimate FM tuner. Massive in terms of technology, size and features dedicated to extracting every ounce of performance from radio, including impressive multi-purpose oscilloscope display.
CLASSICS

TECHNICS ST-8080 1976 £180
National Panasonic's specialist hi-fi brand was a big hitter back then, and this is no exception. Superb FM stage makes for a very clean and smooth listen with lots of detail and depth.

ANALOGUE RECORDERS

YAMAHA TC-800GL 1977 £179
Early classic with ski-slope styling courtesy of Mario Bellini. Middling sonics by modern standards, but cool nonetheless!

AIWA XD-009 1989 £600
Aiwa's Nak beater didn't, but it wasn't half bad nonetheless. Massive spec even included a 16x4 DAC!

NAKAMICHI CR-7E 1987 £800
The very best sounding Nakamichi ever - but lacks the visual drama of a Dragon.

PIONEER CTF-950 1978 £460
Not up to modern standards sonically but a great symbol of the cassette deck art nonetheless.

REVOX A77 1968 £145
The first domestic open reel that the pros used at home. Superbly made, but sonically off the pace these days. B77 better, but couldn't match the Japanese.

SONY WM-D6C 1985 £290
Single capstan transport on a par with a Swiss watch, single rec/replay head better than most Naks. Result sublime.

SONY TC-377 1972 £125
A competitor to the Akai 4000D open reel machine, the Sony offered better sound quality and is still no slouch by modern standards.

DIGITAL RECORDERS

SONY MDS-JESSES 2000 £900
The best sounding MD deck ever, thanks to awesome build and heroic ATRAC-DSP Type R coding.

SWF PIONEER PDR-SS5RW 1999 £460
For a moment, this was the CD recorder to have. Clean and detailed.

MARANTZ DR-17 1999 £1100
Probably the best sounding CD recorder made; built like a brick outhouse with a true audiophile sound and HDCD compatibility.

PIONEER DM-0900 1997 £500
Serious and sophisticated sound thanks to well implemented ATRAC 4.5; surprisingly musical MD recorder.

KENWOOD DM-9090 1997 £500
Wonderfully open and neutral sound puts box loudspeakers to shame. Properly serviced they give superb midband performance, although frequency extremes less impressive. Ideally, use in stacked pairs or with subwoofers and superspeakers.

LOUDSPEAKERS

ACOUSTIC RESEARCH AR155 1978 £125
Yank designed, British built loudspeaker became a budget staple for many rock fans, thanks to the great speed from the paper drivers, although fineness was most definitely not their forte...

BBC LS5/5A 1972 £88
Extremely low colouration design is amazing in some respects – articulation, stage depth, clarity – and useless in others (both frequency extremes). Came in wide variety of guises from various manufacturers building it under licence. Partner with Rogers AB1 subwoofers for an extra two octaves of bass!

KEF R105 1977 £785
Three way Bextrene-based floorstander (complete with castors!) gave a truly wide-band listen and massive (500W) power handling. A very neutral, spacious and polite sounding design, but rhythmically well off the pace. The quintessential nineteen seventies loudspeaker.

IMF TLS80 1976 £550
Warm and powerful nineteen seventies behemoth with transmission loading and a mixture of KEF and Celestion drive units. Impressively physical wideband sound but rhythms aren't its forte.

MAGNEPLANAR SMGA 198X £800
Technological loudspeaker with genuinely musical abilities; fast, smooth, open, dry...
and one of the first of the polypropylene designs: warm, smooth, clean and powerful sound.

MISSION 770 1980 £375
Back in its day, it was an innovative product and one of the first of the polypropylene designs: warm, smooth, clean and powerful sound.

MISSION 752 1995 £495
Cracking Henry Azima-designed floorstanders combined HDA drive units and metal dome tweeters with surprisingly warm results. Benign load characteristics makes them great for valves.

HEYBROOK HBI 1982 £130
Peter Comensu-designed standmounters with an amazingly lyrical yet decently refined tweeters with surprisingly warm results. Good enough to partner with very high end ancillaries, yet great with budget kit too. A classic.

CELESTION SL6 1984 £350
Smallish two way design complete with aluminium dome tweeter and plastic mid-bass unit set the blueprint for nineteen eighties loudspeakers. Very open and clean sounding, albeit course at high frequencies and limp in the bass. Speakers would never be the same again...

MISSION X-SPACE 1999 £499
The first mass production sub and sat system using NXT panels is a sure-fire future classic – not flawless, but a tantalisingly unboxy sound nonetheless!

When a classic goes ‘poof’ your troubles have just started, but there may be a good ending. Replacing failing parts can improve the sound, so here is a short listing of all these companies who specialise in getting a classic up and running again after its deposited a small ring of soul on your ceiling!

GT AUDIO
(Graham Tricker, Bucks)
Leak Troughline specialists. Also Quad and most classic tuners, radios and amplifiers restored, repaired. Tel: 01895 833099 Mob: 07960 962579 www.gtaudio.com

DR MARTIN BASTIN
(Shropshire) Garrard 301/401 restoration, renovation and service. Special plinths; rumble cures, etc. Tel: 01584 823446

ARKLESS ELECTRONICS
(Northumberland) Specialist in repairs, restoration and modifications to all amplifiers, valve or solid state, ancient and modern. Tel: 01670 530674 Email: info@arklesselectronics.com www.arklesselectronics.com

CLASSIQUE SOUNDS
(Paul Greenfield, Leicester) ESL-57s restored, rebuilt, fully renovated or improved. Leak, Quad valves amps etc. Tel: 0845 123 5137 Mob: 0116 2835821 Email: classique_sounds@yahoo.co.uk www.flashbacksales.co.uk/classique

REVOX
(Brian Reeves, Cheshire)
Revox tape recorder spares, service and repair. Accessories also available. Tel: 0161 499 2349 Email: brian@revoxservice.co.uk www.revox.freeuk.com

CLASSIC NAKAMICHI
(Paul Wilkins, Worthing, West Sussex). Restore, Repair & Service Nakamichi Cassette Decks. Tel: 01903 695695 Email: paul@bowersandwilkins.co.uk www.bowersandwilkins.co.uk

SOWTER TRANSFORMERS
(Brian Sowter, Ipswich)
Large range of audio transformers for valve amps, cartridges, line drive, interstage plus all associated services. Tel: 01473 252794 www.sowter.co.uk

WEMBLEY LOUDSPEAKER
(Paul MacCallam, London) Comprehensive loudspeaker servicing. Tel: 020 8 743 4567 Email: paul@wembleyloudspeaker.co.uk www.wembleyloudspeaker.com

ATV AUDIO
(Henry Dula, Surrey)
Repairs, restorations and upgrades to valve and transistor amps and all analogue audio including Revox. Tel: 01372 456921 Mobile: 07730 134973

MISSION X-SPACE 1999 £499
The first mass production sub and sat system using NXT panels is a sure-fire future classic - not flawless, but a tantalisingly unboxy sound nonetheless!

MISSION 770 1980 £375
Back in its day, it was an innovative product and one of the first of the polypropylene designs: warm, smooth, clean and powerful sound.

MISSION 752 1995 £495
Cracking Henry Azima-designed floorstanders combined HDA drive units and metal dome tweeters with surprisingly warm results. Benign load characteristics makes them great for valves.

HEYBROOK HBI 1982 £130
Peter Comensu-designed standmounters with an amazingly lyrical yet decently refined tweeters with surprisingly warm results. Good enough to partner with very high end ancillaries, yet great with budget kit too. A classic.

CELESTION SL6 1984 £350
Smallish two way design complete with aluminium dome tweeter and plastic mid-bass unit set the blueprint for nineteen eighties loudspeakers. Very open and clean sounding, albeit course at high frequencies and limp in the bass. Speakers would never be the same again...

MISSION X-SPACE 1999 £499
The first mass production sub and sat system using NXT panels is a sure-fire future classic - not flawless, but a tantalisingly unboxy sound nonetheless!
TEAC
New Reference 01

Reference A-H01
Stereo Pre-main Amp with 24bit D/A Converter

Reference UD-H01
32bit D/A Converter with USB Audio Interface

Reference DS-H01
iPod, iPhone, iPad docking station

FUTURE PROOF
This is the new Reference 01 Series from TEAC.
A mix’n’match system of real hi-fidelity quality in small, beautifully designed units.
With options from the 24 bit power DAC using the latest Ice Power technology to the incredible High End specification of the 32 bit D/A converter, the Reference 01 series represents one of the most advanced ranges ever produced. Play music from any iPod, iPhone and iPad in true hi-fi sound on the Reference DS-H01 Docking Station.
And the range will be increased early 2012 with the new wireless audio adapter and digital CD player.
This is not just a new product range. This is the future of music and entertainment.
Be a part of it and experience a new dimension.
visit www.teac.co.uk/01

Future-Proof entertainment from TEAC
The leaders in digital music
Noel Keywood and Adam Smith report on the Sound & Vision Show 2012, Bristol.

This year’s Bristol Show, based in the city’s Marriott Central hotel, was as busy as ever, in spite of gloom and doom arising from Europe’s economic woes. Even the weather was Clement; the biting winds that often sweep Bristol in February were replaced by sunshine. As a long established show, this one attracts a wide selection of exhibitors, including many from Europe. Here is what we saw.

WHARFEDALE
Chief Acoustics engineer and Hi-Fi World contributor Peter Comeau flew in from the IAG factory in China to tell us about his latest project, the bijou Wharfedale Denton – at right in the picture. The new Denton is another of Wharfedale’s expanding range of golden oldies. Built to suit traditional tastes, it is almost certainly aimed at the Chinese market, and a wider Far East audience eager to buy into old values and trad styling. Inside lie a pair of modern drive units, of course. That’s Peter on the left, jet lagged but manfully coping with a glass of champagne all the same, recalling the long history of Wharfedale to members of the Press.

CHORD ELECTRONICS
Here is Chord’s top CD player, the Red Reference, now lifted to MkIII form we were told. As always for Chord products, it glowed beautifully in the low lit room, from internal lighting that shines out through windows that give a view in to the complex internal circuits boards and components. The door of this player now opens and closes at the touch of a button, and a USB input has been fitted that accepts a computer link to the internal DAC, up to 192kHz sample rate. It works Asynchronously, meaning the player’s internal master clock controls proceedings, the computer becoming a slave. This is Chord’s new updated Reference CD player and it looked stunning. Look out for our review soon.

HEED
Well known for their compact but high quality units such as the Canamp headphone amplifier and Orbit turntable power supplies, Heed resurrected another old name in the form of the Obelisk range. Taken from Ion Systems products of the 1980s, this introduced a range of half-width separates including an integrated amplifier designed with help from original Ion Systems owner Richard Hay. In addition, a CD player, pre-amp, power amps, DAC and various power supplies complete the range, and all are available with gloss black or rather fetching white front panels because, according to Heed, “white is the new black” – hmmm!
FEATURE

AUDIOQUEST
Locked away in glass cabinets were some tasty digital cables in the Audioquest room. Shown are Carbon and Cinnamon USB links, but there was an array of HDMI cables too, including powered versions (?). We didn't get to find out about this at the time as there were too many people milling around but it all looked very interesting. The sound of digital cables is fast becoming a big issue it seems.

NEAT
It was Neat by name and Neat by nature in the Neat room, as designer Bob Surgeoner unveiled his new baby in the form of the Iota. Small two way bookshelf designs intended for use horizontally, these looked fabulous, sounded much bigger than they had any right to, and came in a wide variety of funky colours. We like!

PMC
PMC celebrated their twentieth anniversary last year and this has heralded the launch of the aptly named ‘Twenty’ series of loudspeakers. With the range comprising two stand mounters, two floor standers and a newly launched centre channel, the Twenty promises something for everyone. The styling is very funky, with the leaned-back shape of the enclosures and matching stands adding a very striking ‘go-faster’ attitude to proceedings. Even more encouragingly, however, the sounds they made turned out to be some of the finest of the show for me – an impressive first encounter.

TANNOY
Out from under the wraps came the new Tannoy Precision 6.4 loudspeaker, price around the £2k mark we believe. It uses four 6in drive units to keep the front baffle narrow. The top one is a Dual Concentric with horn loaded tweeter firing out through the woofer, to cover the entire frequency range from one coherent source. Of the three drivers below, the centre one is a bass unit and flanking it are ABRs, or Auxiliary Bass Radiators. These are passive (undriven) cones that act much like ports, but have many benefits. They are an easier and more precise way to tune port behaviour and they block box reflections too. ABRs give better bass quality than open ports, but raise cost of course. We expect powerful bass from this model.

SANSUI
From a new name to a very old one, Bristol 2012 heralded the return of the Sansui name, amid a room full of classic Sansui memorabilia. The new items are finely tuned Chinese-sourced items and include a CD player, network streamer, DAC, amplifiers and an impossibly cute micro system, all of which were on demonstration. The sound was fine and the prices very keen indeed, promising something of a shake up at the affordable end of the market.

MARANTZ
The Marantz Airplay system looked smart and technically interesting. It accepts Apple Airplay audio streams direct from iPad or iPhone, so music can be played back wirelessly through the system, at CD (44.1kHz) sample rate.
Aha! Roy Gandy, owner of Rega Research was spotted by us running around the High End show in Munich a few years ago muttering about ‘bending mode radiators’ and here is the end result - their new R10 loudspeaker. At top is an unusual bending mode drive unit, a variant of NXT technology also used by Naim. BMRs give a clean, clean sound free from distortion, so the R10 should give interesting sonic results.

Elac loudspeakers of Germany were showing a fascinatingly hi-tech mini loudspeaker, the 301.2, having a small cone midrange driver fitted with a co-axial tweeter. It was partnered by a floor standing 2030 subwoofer. Two 301.2 satellites and one 2030 (a 2.1 arrangement) were making a very convincing sound in the Elac demo room at the show and would appear to offer a great solution to the difficulty of finding a room friendly mini speaker system. Price was £1349.99 we were told.

Also on show was a single floor stander flown in from a Tokyo show, the new FS257, selling at £2499 per pair. Possessing a single Jet ribbon tweeter flanked by two bass/midrange units in classic D’Appolito arrangement it looked technologically advanced and purposeful. We expect a clean, fast sound.

KEF have launched an R Series that sits above the Q Series but is less costly than their top Reference models. Our picture shows the tall, narrow Blade, a standmount Q300 and floorstanding Q700. They use KEF’s Uni-Q co-axial drive unit with tweeter firing out through a Tangerine waveguide from the centre of the drive unit, to give a focused source. As always KEF demonstrated to a packed room throughout the show. We noted that amplification was from Electrocompaniet, including their impressive Nemo power amplifiers.

A new name to the hi-fi scene was Oriton, introducing their delightfully eccentric, brightly coloured and alarmingly wobblingly hi-fi racks. Fear not, however – they are supposed to be like this! Fielding a system that also comprised prototype Oriton loudspeakers and power amplifiers plus a mock-up of a forthcoming turntable, this was an interesting demo from an intriguing newcomer.

In the Spendor room we spotted their new A7 loudspeaker, complete with dome tweeter sitting behind a dispersion grille, bass midrange unit below it and powered bass unit below that. Behind is a twin venturi port that acoustically loads the bass unit. Our picture shows the deep gloss finish version priced at £3995.
PUT A SPRING INTO YOUR
VISIT OUR WEBSITE: www.hi-fiworld.co.uk

UK SUBSCRIPTION
SAVE UP TO

16.5%

SAVE UP TO 16.5% off the cover price when you subscribe to Hi-Fi World. That's an amazing £3.42 per issue, including postage.

FOR BACK ISSUES ENQUIRIES PLEASE CALL
01442 820580

OVERSEAS SUBSCRIPTIONS IF YOU LIVE OUTSIDE THE UK, PLEASE CALL FOR OUR LATEST PRICES
+44 (0) 1442 820580

SO WHAT ARE YOU WAITING FOR? CALL NOW!!!
SUBSCRIPTION HOTLINE 01442 820 580
Lines open Mon-Fri 9.00-5.00 or (weekend answering service available)

email: hifiworld@webscribe.co.uk
Fax No: 01442 827912

FOR OUR ON-LINE MAGAZINE GO TO WWW.HI-FIWORLD.CO.UK
WHY SUBSCRIBE TO HI-FI WORLD?

- 12 issues a year delivered straight to your door.
- Be first to grab a bargain in our “Free Reader Classified Ads” section.
- Run by dedicated hi-fi engineers and enthusiasts.
- Subscribers receive a minimum 10% Discount annually.
- Hi-Fi World has become famous for its informative reviews and radical kit designs.

PLUS! Subscribe by Direct Debit and receive a 16.5% discount on a yearly subscription (UK only).

Instruction to your Bank or Building Society to pay by Direct Debit

Please fill in this form and send to:

Hi-Fi World Subscriptions Department Unit 8, The Old Silk Mill, Brook Street, Tring, Hertfordshire, HP23 5EF

Name and Full Postal Address of your Bank/Building Society:
To: The Manager, Bank/Building Society
Address
Postcode
Name(s) of Account Holder(s)

Branch Sort Code
Bank/Building Society Account Number
Reference: HF
Instruction to your Bank or Building Society
Please pay Webscribe Ltd Direct Debits from the account in this instruction subject to the safeguards assured by the Direct Debit Guarantee. I understand that this instruction may remain with Webscribe Ltd and, if so, details will be passed electronically to my Bank/Building Society.

Signature(s)
Date

Bank and Building Societies may now accept Direct Debit Instructions for some types of accounts. The guarantee should be detached and retained by the Payer.

Direct Debit Guarantee

• This Guarantee is offered by all banks and building societies that accept Direct Debits.
• If there are any changes to the amount, date or frequency of your Direct Debit, Webscribe Ltd will notify you 10 working days in advance of your account being debited or as otherwise agreed. If you request Webscribe Ltd to collect a payment, confirmation of the amount and date will be given to you at the time of the request.
• If an error is made in the payment of your Direct Debit by Webscribe Ltd or your bank or building society, you are entitled to a full and immediate refund of the amount paid from your account.
• If an error is made in the payment of your Direct Debit by Webscribe Ltd or your bank or building society, you are entitled to a full and immediate refund of the amount paid from your account.
• You can cancel a Direct Debit at any time by simply contacting your bank or building society. Written confirmation may be required. Please also notify us.

TERMS & CONDITIONS: You will receive 12 issues per year. Minimum subscription term is 12 months. Prices include P&P and are correct at the time of going to press. All prices are quoted in sterling. Offer available for UK subscribers only. For enquiries relating to overseas pricing call +44 (0) 1442 820 580.

Send this form to:

Hi-Fi World, Subscriptions Department Unit 8, The Old Silk Mill, Brook Street, Tring, Hertfordshire, HP23 5EF

I would like a years subscription to Hi-Fi World and receive a discount off the cover price (I have read and accept the terms and conditions).

I would like to pay for my 12 issues by:

- 6 monthly Direct Debit: Pay £20.91 every 6 months saving 15% off the yearly subscription rate of £49.20
- Annual Direct Debit: Pay £41.08 every 12 months saving 16.5% off the yearly subscription rate of £49.20
- Annual cheque/credit card: Pay £42.31 saving 14% off the yearly subscription rate of £49.20

Cheques made payable to Audio Publishing Ltd.

Your Details
Title ________ Forename ________
Surname ________
Address ________
Postcode ________
Daytime Tel: ________
Email: ________

Please debit my □ VISA □ MASTER □ MAESTRO □ AMEX (SWITCH)

Security No: ________ (last three digits printed on the signature strip)
Valid from Date: ________ Expire Date: ________

Switch card issue No: ________

Cardholder Signature: ________

Outside UK:-

EUROPE Airmail £50.00 □
OVERSEAS Airmail £70.00 □
**Miles Davis**  
*Live in Europe 1967: The Broadcast Series Vol.1*  
**Music On Vinyl**

Featuring his famous quintet of Wayne Shorter (tenor sax), Herbie Hancock (piano), Ron Carter (bass), and Tony Williams (drums) this series of five discs takes audio from the original state-owned television and radio sources in Belgium, Denmark, and France. Focusing on three northern European festival performances over the course of nine days in October-November 1967, the tracks are all previously unreleased or previously only bootlegged material. Specifically from Antwerp 28 October 1967, Copenhagen 2 November 1967 – which has never been released commercially or as a bootleg – and Paris 6 June 1967, the latter being a full ninety minute excursion including the rare ‘Agitation’ and ‘Footprints’ that have not even made it to bootleg.

The discs are contained within a pizza style box and feature a 16-page booklet with liner notes by jazz-historian Ashley Kahn. Each disc is contained within its own inner which is wax coated to help protect the disc. On the front of each sleeve is a black and white photograph of each band member.

The mastering, especially for a bunch of live cuts, is excellent, via Music On Vinyl (www.musiconvinyl.com), but the pressing of these vinyl discs is superb. The culmination of both means that even complex, almost chaotic pieces like the Paris gig’s ‘Riot’ can easily be followed and enjoyed, despite the cacophony. This is a truly memorable suite of concerts, up there with the very best from the Davis’ canon.

**Joe Harriott**  
*Parting With Joe Gearbox*

A highly talented alto sax player that enjoys too little attention from jazz enthusiasts today, Harriot was an influential figure in the free jazz circles in England during the fifties and sixties. Jamaican born, Harriot moved to the UK in 1951 and found work with figures such as Tony Kinsey and Ronnie Scott before releasing ‘Southern Horizon’, his first album, in 1959. It was during a hospital stay, in 1960, that he found his own free jazz pathway. Often accused as being an Ornette Coleman copyist, Harriott was proved to have developed his own style in parallel with the great American sax player.

Accompanied by Phil Seamen on drums, Johnny Wool on piano and Major Holley on bass, this album was recorded during Harriot’s earlier bop style and was recorded at a party, in 1956, at the home of semi-pro pianist William Hague Joyce. This informal gathering was never intended to be recorded as an archival performance. The fact that Joyce happened to be present with a decent quality Sony reel-to-reel was pure happenstance and, for Harriot fans, a fortunate one.

Making its first appearance on these pages, British record label, Gearbox (http://gearboxrecords.com) focuses on British jazz and blues. Its vinyl issues are famed because they have never been issued before and, secondly, the company takes pride in its audiophile sound production. As such, the music is played in a laid back atmosphere with the sounds of a party clinking and muttering all around. Harriott is also a little ‘laid back’ in the mix but very easily discernible with a slightly prominent bass but there is plenty to enjoy here with Harriot offering a beautifully engaging performance. A real rarity, this LP proves that British jazz of the period had a voice of its own.
Jennifer Warnes
The Well
Impex

Jennifer Warnes? Some will know her from her seventies hit 'Right Time of the Night' while others will be more familiar with her duet with the Righteous Brothers' Bill Medley on 'The Time of My Life' from the film 'Dirty Dancing'. The cognoscenti will also know her from her critically acclaimed LP release, 'Famous Blue Raincoat', her album of Leonard Cohen songs.

This album, originally released in 2001, scores in three ways: as a creative project, sonically and as a piece of art. As a vehicle for her carefully crafted songs, 'The Well' is haunting, spiritual, lilting and innovative with a story to tell.

As an object in itself, the album is a work of beauty. Presented within a wooden box, custom made for the album, with updated artwork and a numbered brass plaque positioned on the front, the package contains the album which spans three discs and a 12-page, large format book that features lyrics, notes plus words of wisdom from Warnes herself on each and every track. You also receive a piece of art presented on a card with a pearlescent finish with an article on the flip side penned by Texas author, Brad Bucholz, about 'The Well'. The box set includes the original album plus three bonus tracks: 'La Luna Brilla', 'Fool For the Look (In Your Eyes)' and a Bob Dylan cover of 'Born In Time'.

Sonically, the album has been mastered on an all valve-based system via Bernie Grundman, known for his long term work with the now defunct Classic Records record label. Mastered onto 45rpm discs, the album has that valve 'glow' that coats the music with a rich analogue warmth. A dynamic recording, the vinyl provides an appreciably low, powerful bass with detailed upper frequencies. Easily the best recording of the album out there.

Gary Numan

Gary Numan was one of the pioneers of the synth pop revolution in the early eighties but has remained an icon throughout with alt-indie bands naming him as an influence during the nineties and, more recently, goth-flavoured industrial rock outfits utilising his more contemporary style as a scratching post. This new box sets takes us back to those early, classic dark, clinical, robotic times, however.

Resplendent in a magnificent five disc boxed set, the contents include the album, 'Telekon' spread over two discs and the 'Living Ornaments '81' live album which has been presented as a three disc set. Each of the discs has been packed within their own heavy-weight sleeves with card inners. On a picky point, it would have been nice to have seen the records contained within soft plastic bags too to protect them from paper scratches.

Numan fans will be pleased to see that 'Telekon' has not only been remastered from the original analogue tapes but it is released for the first time as a double album, featuring the singles: 'We Are Glass' and 'I Die You Die'. These singles initially failed to appear on their sister album because of budget cuts.

'Living Ornaments '81' has also been remastered. Recorded on the last night at Wembley Arena on 28 April 1981 and supposed to be, at least at that time, Numan's farewell to live performance, the songs feature many hits and classics from his early albums plus the then forthcoming single 'She's Got Claws' from the album 'Dance'.

Sonically, Vinyl 180's (vinyl180.com) box set offers excellent dynamics with plenty of opportunities to hit the ear with brisk upper midrange synths and deep bass impact. Well mastered and pressed, the set offers both clarity and oodles of detail that will satisfy any Numan fan who has an eye for audiophile quality.
Arguably the best cassette deck ever made, certainly the most versatile, Paul Rigby looks at the history and the technology behind the Nakamichi Dragon.

This year, according to Chinese lore, is the Year Of The Dragon, so it seems fitting to be taking an appreciative look at a piece of precision engineering that bears the same name, as it enters its 30th anniversary. Yet this particular Dragon doesn't spit much fire and brimstone, and it didn't chew tapes either. The Dragon was Nakamichi's top model and arguably the best cassette deck ever.

The roots of the Dragon cassette deck began in 1948 when Etsuro Nakamichi, an engineer who would later become famed for his marketing prowess, launched Nakamichi, the company. Although Etsuro initially began a radio and speaker production business, it was his quest to reproduce sound through the medium of analogue tape that really started the creative ball rolling, producing an open reel machine, the Fidela 807, in 1957. It wasn't until 1972, after he and his brother, Niro, had produced numerous OEM cassette decks for the likes of Ampex, Harmon Kardon and ELAC, that the company released the first cassette deck under its own name, the Nakamichi 1000: the world's first, three-head cassette player. That began a series of cassette deck innovations which culminated in the release, during 1982, of the Nakamichi Dragon.

Paul Wilkins, Managing Director of Bowers & Wilkins and son of B&W founder, Roy Wilkins, which still offers a full servicing facility for most Nakamichi cassette decks, remembers when he first came face-to-face with the company: "Back in 1983, I was working for B&W loudspeakers. B&W had distributors all over the world and had appointed Nakamichi as B&W distributor in Japan. So a relationship was built up, specifically between John Bowers and Niro Nakamichi, a charming gentleman. Eventually, Niro asked John Bowers to distribute his products in the UK."

The Dragon's famed technical prowess stemmed from the company's commitment to innovation. Helped, no doubt, by Nakamichi's wealth of engineers, as Wilkins remembers, "The ratio of engineers to any job was more than you would expect from any other company. To such an extent that you'd be talking to a marketing person and then you'd later find that they used to be an engineer as well! The whole company was very focused on the development of their product. This gave the company a feel unlike any other Japanese outfit."

Nakamichi's cassette deck sales hit their height during the mid-to-late eighties, which will be a surprise to many, especially as the CD player was released in 1983. "A lot of people didn't embrace the digital format so cassette deck sales continued to grow right through the eighties" said Wilkins. "The downward slide was acknowledged by Nakamichi around 1994-95."

The company withdrew from the hi-fi market in 1997. "They did make CD players for a while," said Wilkins, "but they weren't exactly brilliant. There was nothing wrong with them but they were expensive for what they were."
SERVICE
If you’re using a Nakamichi Dragon a lot, then a five year service is recommended. Bowers & Wilkins can provide a full MOT for your Dragon and just about any other Nakamichi cassette deck too. Don’t confuse this Bowers & Wilkins with the global speaker manufacturer, though. This company is separate, housed within the original retail shop where the speaker manufacturer began. In fact, Paul Wilkins runs his business from the same office that his father and founding BBW man, Roy Wilkins, used. Holding years of knowledge and experience on Nakamichi, Bowers & Wilkins is the perfect outfit to service your precious machine.

“We don’t do work that’s unnecessary,” said Wilkins. “If a machine just requires a wash and brush up then we wouldn’t change parts for the sake of it. A full service for the Dragon would be between £00-£400. We’d clean it through and replace any worn parts like pressure rollers, drive belts, idle pulleys, any lamps that have failed, alignment checks such as head alignment, speed and so on and then recalibrate it to the original factory specifications.

There are a few older Nakamichi modes that we are not able to service at all: the 600 and 700 models are examples. The vast majority we can handle. We have a big stock of parts that goes back to our time when we were distributors. When we knew that Nakamichi’s cassette decks would be finishing, we made sure that we took thousands of parts because we knew that we would be carrying on with the servicing. So we have most of the parts for most of the models. Where we don’t, there are alternative sources but it hasn’t been a problem so far. Some of the motors are a bit of a problem. Instead of replacing them sometimes we have to strip them down and rebuild them.”

Contact 01993 695695 or click on www.bowersandwilkins.co.uk for more information

UNDER THE HOOD
The inside of a Nakamichi Dragon is a wonder to behold, displaying two phase lock loop direct drive motors, one for each capstan – unique in the field of Nakamichi cassette decks. “They are very accurate, speed-wise, and very low on wow and flutter” confirmed Steve Pawson, Nakamichi Service Manager. “This is key to how the Dragon works because it doesn’t use the pad lifter inside the cassette, it pushes that away and controls the head-to-tape contact using these two motors.”

The tape supply motor runs two percent slower than its sister, take-up, motor, providing a necessary tape tension across the head. This means that, during tape operation, you don’t have to rely on a mechanically dubious mechanical pad found in a relatively cheap cassette shell to supply that essential head-to-tape contact. “That also improves accuracy of tracking,” said Pawson. “They are switched so, when the tape goes into the opposite direction, the opposite motor slows down very slightly and gives you that same tension. It’s a complex switching system but it works very well.”

The Dragon is a three head machine (i.e. play, record and erase) which means that each head can perform the job it was designed to do rather than suffer the compromise found in a two head machine. With all Nakamichi decks, the heads are totally separate, “What you tended to find with other manufacturers” explained Pawson “was that the record and playback heads were sandwiched together, even though they might have been separate heads. With individual heads, that means that you can make improved azimuth and head height adjustments”.

Dragon heads, made from very tough Crystalloy, are specific to that machine with six coils sitting within one head. “It’s a four track head (two tracks for either direction) but it has one more coil that is located behind each of the channels. It looks at the signal that the first channel coil receives and then the signal that the other channel coil receives and then makes a comparison. Then the motor adjusts for errors. No other machine has that,” said Pawson. “It’s one of the ultimate playback machines. If you have a large library of material that you’ve recorded over the years, the azimuth isn’t going to be on song for every tape that you have. With a Dragon, you will squeeze the best possible performance from that cassette. With excellent recording prospects via the manual calibration system.”

TALKING...
...Tapes
If you own a Dragon, what cassette tape should you use? “We mainly steer our customers towards TDK and Maxell,” said Pawson, “because they were closest matched to the machine. The calibration tapes supplied to Nakamichi were made by both companies too. Incidentally, if you are looking at a three head machine that doesn’t have a calibration facility I would specifically go for a TDK XLII or SA. For a Dragon I would go for any variant.

...Recording
“When recording on a Dragon, I leave Dolby set to ‘off’, get a decent quality metal tape, push the recording signal level (up to +7 or +8) to reduce the noise floor which then produces a beautiful sound without a hint of compression. There are very few machines that can cope to that level. I’ve recorded tapes on my Dragon and CR-7, played them back on other people’s machines and their meter is off the scale.”

...Upgrades
There is a hardware upgrade available via Fidelity Audio (HYPERLINK “http://www.fidelityaudio.co.uk” www.fidelityaudio.co.uk), for £195. Known as a Level 1 upgrade, Fidelity Audio will replace a series of OpAmps, capacitors and the like that will affect the sound quality on playback only. Ask the company about the possibility of a similar upgrade for the recording portion of the deck.

Should you upgrade? Bowers & Wilkins certainly don’t advise it on the grounds that you may not like the sonic results and also you are placing the internal components at risk. I, myself, wouldn’t encourage you to upgrade – the Dragon is a classic piece of hi-fi, after all. It’s like despoiling a work of art.

That said, Fidelity Audio is a respected company, with a good track record and which has your aural interests at heart. To that extent, now that technology has improved since the Dragon was released and in the interests of journalism I decided to give it a go.

I utilised Madness’ debut vinyl album, ‘One Step Beyond’, transferred via my Avid Acutus reference turntable onto a Maxell Metal CD 60 tape, for sound tests. The results were intriguing as the upgraded Dragon provided a much wider stageimage over the original, with greater instrumental separation, a richer, overall presentation plus a more forceful bass. Upper mids were rather more incisive too. My upgrade was wholly successful.

Other upgrades are available including an infrared remote control to replace the original cabled remote. I have not used it so cannot comment on its usability, however. Check out www.naks.com for more information on that upgrade plus other enthusiasms information on all things Nakamichi.
INSPIRE HI-FI AWARD WINNING TURNTABLE UPGRADES FOR LINN, REGA & THOREN’S

See and hear our range of fantastic LP12 upgrades at the Audio World Show 24th & 25th March 2012

VIVID REVIEW

PROUD TO BE AWARDED 5 GLOBES

For:
• silky, spacious midband
• superior grip and focus
• enhanced dynamics
• fit and finish

Against:
• Full package £799
• Sub chassis with arm board £299
• Acri mat £25
• Hercules PSU £169
• Plinths £POA
• Complete Re Build & Service £50

QUEST REVIEW

PROUD TO BE AWARDED 5 GLOBES

For:
• excellent midband focus
• super base grip
• fine speed stability
• enhance dynamics
• fit and finish

Against:
• nothing

50mm solid birch ply plinth with acrylic and sorbothane feet £189
• Veneer in Maple, Cherry, Oak or Walnut £89
• Acri mat £25

23mm machined acrylic platter £99
• Puka record platter weight £49
• Re Build £40

OUR LATEST ADDITION TO THE VIVID UPGRADE...

Offering those who want to go the DC route. We now have Origin Live Ultra and Advanced power supplies and motors available to be fitted with or without a VIVID Upgrade.

ULTRA PSU and motor upgrades £345 + FULL VIVID UPGRADE. Total Package £395
ADVANCED PSU and motor upgrades £582 + FULL VIVID UPGRADE. Total Package £1,232

Origin Live’s exciting range of tone arms also available to be fitted with your LINN upgrade.

vivid + ORIGIN LIVE = CLEARLY THE BEST UPGRADES FOR YOUR LP12

PLUS... COMING SOON...

THE VIVID UPGRADE OPTION FOR A 12" ARM

Call our specialist rebuild HOTLINE for the above and more amazing value for money options

T: 01246 827272

www.inspirehifi.co.uk
M: 07932 367555  E: robert@inspirehifi.co.uk

While you wait rebuilds available. Visit our Demo Suite J29A M1.

SUPPORTING BRITISH MANUFACTURING
There is a sudden glut of headphones appearing on the market of late – Shure enters with the SRH1440, open-backed ‘phones. Paul Rigby lends an ear.

Shure has arrived back on the headphone scene with two new designs. While the company’s SRH1840 ‘flagship’ model, retailing at around £600, is aimed at those audiophiles whose wallets breath a more rarefied air, the SRH1440, its cheaper brother, has been positioned towards the enthusiast who is serious about his headphones but who also appreciates more value for his money.

This steel-framed, padded head-band pair of open-backed headphones don't look particularly special. If anything, they have a classic, rather traditional air about them but they do provide a welcome, snug secure fit to the head. The chassis arrives in its own packing case with a spare set of velour ear-pads and a cable that sits within a zippered pocket. Running on 40mm neodymium drivers, this circumaural design weighs 313g without the dual-exit, detachable oxygen-free copper cable (which stretches to 2.1m). The cable is finished with a gold-plated 3.5mm mini jack plus a full size 6.3mm plug that screws over the top, if required.

SOUND QUALITY
The Shure is far more sensitive than my reference Sennheiser HD650s (£340; running off a Musical Fidelity X-Can 8VP headphone amp), providing a much higher volume for the same degree of gain. Commencing on the digital route and spinning the Sugababes 'Freak Like Me', my first impression was that the Shure offered complete honesty in its sonic presentation. This track is mastered for chart exploitation and is highly compressed with a bright, harsh series of high frequencies. The Shure 'phones hid none of this, slawing just how nasty this track can be. Where my HD650s utilise a wealth of bass power to act as a cushion, the Shure cannot compete, the only cushion that it can provide is as hard as a bed of nails. This narrow band of low frequencies gives the Shure a tight, bass punch but without the HD650's sub-bass power and broad, warming low frequency bolster.

Because the Shure's tendency to lift upper mid detail is accentuated, vocal harmonies from the Shure, lose the soft, lower mid floor but there is a wealth of upper mid detail, while the accompanying acoustic guitar is spotlighted, providing a more meticulous presentation than the HD650.

Even better recorded digital fare, the Barclay James Harvest's 'Sideshow' being a case in point, a warmer master overall, was treated with a measure of sonic disaste from the Shure as its bass response went AWOL while the upper minds and the treble found the whole experience distinctly unpleasant. Again, though, the Shure mined a heap of detail, presenting it in an almost forensic manner.

The Shure 'phones felt a lot more secure playing vinyl. Louis Armstrong's 'Rockin' Chair' provided a natural warmth which tamed the overly transparent nature of the Shure and rolled off the headphones tendency to lift the upper mids. Armstrong's trumpet, for example provided a wealth of texture and emotion as every nuanced elevation and movement was followed by the SRH1440s, providing a larger sonic story, providing the ear with broad upper mid brushstrokes.

Moving to the vinyl version of Frank Zappa's 'Hot Rats' (Classic Records) and the lead-off track, 'Peaches En Regalia', the smooth analogue sound provided an important tonal balance that provided an essential warming air to the flow of detailed music on offer. Yes, the Shure found it difficult to rock out with the same carefree abandon as the HD650s but the Shure's attention to detail demanded your attention and provided a voyage of discovery.

CONCLUSION
It may not have the bass response of the Sennheiser HD650 headphones, lacking that design's easy going, laid back output and it can be unforgiving when tackling digital output but for vinyl fans, the SRH1440 headphones will be a useful addition to the demo list, especially if the retrieval of detail is important to you. The SRH1440s offer an informative presentation with a scrupulous attention to the contents of any vinyl master.
The best yet

Then we improved it

When the TD712z was acclaimed as the most accurate speaker ever, all we heard was the challenge to do better. So now, with more precise engineering, improved patented technology and the highest quality components available, the TD712zMK2. Better than the best there ever was.

Hear the difference at:
Audio Venue, London 020 8567 8703
Cool Gales, Bath 0800 043 6710
Forum HiFi, Nottingham 0115 962 2150
Musicarch, Brighton 01273 607983
Soundlocation 07973 253136

TD712zMK2
Just for the pure performance
You’ve heard about Astrology influencing people’s lives or even actions. You know the sort of thing, Mars moves in conjunction with Mercury that’s influenced by the Moon, which means that now is the day to bake an Apple Flan. The music industry also suffers from strange cosmic convergences that produce head scratching coincidences.

I wonder if the music gods are under the spell of cosmic influences too, like “you will meet a tall, dark stranger and come into lots of money”, because it’s certainly come true as this month we have a gamut of re-issues by that legendary country figure, Johnny Cash.

In fact I have, sitting on a straining desk, seven vinyl LPs devoted to the man himself from three different record labels and, thanks to the great zodiac of the sky, every re-release is unique.

First up is the magnificent ‘At Folsom Prison’ (1968) (Music On Vinyl; www.musiconvinyl.com), a landmark album because it transformed Cash into his alter ego and moved him into his most identifiable phase of his career, as the Man In Black, the tortured soul who sang about murder, conflict and general misdeeds and it was the audience for this gig that helped him change.

Was Cash ready to change anyway, using the location as an ideal place to vent his creative frustrations or did he transform his song set to suit his audience? Whatever the answer is, his delivery proved inspired. His almost casual cruelty, black humour and realism that he infused into his songs provided a tension and a sense of expectation to his performance. The LP is well mastered although there was some slight warping on my pressing. This issue sits well alongside the three other MOV vinyl reissues of the official bootleg sets that detail rarities, demos and live works.

Distributed by Cargo and created by Charly is ‘Rock Island Line’. Originally released during the seventies via Charly, it was reissued again during 1988 via Alain Pourquier, France’s leading Rock’n’Roll DJ. After initially producing a series of 10” albums for Charly Records compiled from recordings made for Sam Phillips’ legendary Sun label, Pourquier, also known as ‘Ding Dong’, then launched into another series of 12” albums for Charly, following the same formula that had been so successful in the 10” series. The tracks focus on Cash songs recorded in 1957 and 1958. This is a beautiful pressing, flat as a pancake and mastering that promotes both clarity and dynamics. A real audiophile treat.

The real treasure house for Cash fans, this month, arrives via Doxy which offers not just the vinyl version but also a CD version of each album, stuffed within the cellophane wrapping, providing extra value for money.

They include Cash’s debut (1957) which is direct from his time at the Sun label. The tracks feature a rather traditional folk and country approach featuring the likes of ‘Ride This Train’ is a concept piece, a narrative/educational album that details the history of the train and the railroad across the USA. An album that investigates tales of the West, this single themed piece allowed Cash to fully explore a single subject, producing a wholly satisfying LP.

1960 was a busy year for Cash who also produced ‘Sings Hank Williams’ for Columbia. On the face of it, this was a tribute piece created seven years after Williams’ death but, in fact, it was a Sun release which happened to find four Williams tracks to justify the title with Cash’s own previously unreleased tracks acting as filler and designed to compete with Cash’s own albums that he was then releasing on Columbia.

Released in 1961, ‘Now Here’s’ was another Sun release competing with Cash’s own Columbia issues. Sun found more unreleased tracks, singles tracks and demos that, despite the relatively ragged sound quality, amounts to an intriguing collection for fans.

All of the LPs from Doxy provide solid mastering and pressing quality that will serve as a welcome source for these long out of print Cash originals. I, for one, hope this trend continues and that Cash remains a source for further vinyl reissues. After all, the man has a wealth of great albums available for reissue from a discography the size of a small Egyptian pyramid.
M1 CLiC Universal Music Controller

iPod digital, USB memory stick, 3 digital inputs, 3 analog inputs.
"you can tell Spring is in the air when a man’s attention becomes occupied by certain things"

Tony Bolton

You can tell Spring is in the air when a man’s attention becomes occupied by certain things - outdoor things - like sheds. Now I’m sure that you’ll agree that a man’s shed is his sanctuary, his refuge from the noise and toil of a busy and demanding world. As the days lengthen, the central heating switches off and the great outdoors becomes a more inviting place, men all over this country are going outside with but one thought in their minds - their sheds!

Not all of them are called such. In fact one of mine, the concrete-block-built one at the back of the garage, has the optimistic sobriquet of “The Workshop”. I started off with the best of intentions, installing some old kitchen cupboards and a worktop. Various useful tools such as soldering irons, pliers and non magnetic tweezers all found drawer space. There is a filing cabinet at the back to house the overflow of old hi-fi magazines. I was organised. I was ready to do all those little jobs and projects that I had been putting to one side for years. I even managed to use it for a couple of repairs to ailing household gadgets, but then it all started to go wrong.

The problem with a workshop (or shed) is that they are a useful space that is not occupied for what are deemed to be essential household purposes. Therefore they can be a very useful place in which to put things that don’t have a home anywhere else (and those irresistible eBay/ junk shop/ auction bargains that don’t need to be seen and ‘approved of’ by the other inmates in the house). And they can also provide a useful dumping ground for household stuff during such major upheavals as new heating systems, or kitchens being installed.

I think you are beginning to get the picture. During last weekend’s sunny weather I went out to my workshop and opened the door. There wasn’t quite an avalanche, although two cassette decks did make an unsuccessful bid to escape. Having caught them I just stood and looked! It was actually worse than I remembered.

My workshop is about six feet wide and about nine feet long with worktop and cabinets along one side under the window. None of this was visible. All I could see was this head-height stack of boxes, interspersed with old blankets protecting various items, that literally filled the space as far as the door. There was only one thing to do.

Having made a cup of tea, I sat down to consider the situation. It would have to be emptied and start again, so out it all came, all over the lawns, with a steadily growing pile of things put to one side to take to the recycling centre. I am pleased to report that not all of this was mine. About a third were household items and gadgets that have spent twenty years lurking in the back of cupboards, not seeing the light of day in that time, but apparently, according to other members of the household, they are useful and must not be disposed of.

So with these put to one side, I worked my way through a motley selection of records that had arrived in large batches and that I hadn’t had time to go through. I also rediscovered my boxes of cassettes that had moved out here temporarily during some decorating work a while ago. And I finally managed to access drawers full of all of those useful little tools that, because they were inaccessible, had meant that I couldn’t do any of the tasks that required them. In the process of all of this, certain gems that had been put out of harm’s way until I had time to deal with them, also came to light.

Amongst these were the Garrard 4HF turntable that partnered my late ’50s Pye Mozart HF10 amplifier in a period mono system that I set up a few years ago.

The Pye Mozart HF10 is a lovely little device that used an EL34 valve to produce about 10 watts. When fed with a now sadly defunct Elac cartridge attached the Garrard, it made very musical and enjoyable sounds through a Goodmans speaker. Alongside this was my old faithful Goldring Lenco GL75, that, after setting up my friend’s example last month, has gone onto the “I must get that going again list”.

These sat on the cabinet of a late 1940’s HMV 1604 table radiogram which works, but needs a good service to the turntable to get it running properly again. Behind this was a Thorens TD 124 Mk.II, fitted with an SME 3012 arm that I bought a few years ago for the princely sum of £75. This is mounted in a great big teak veneered plinth that resonates like mad and so will be the first thing to be replaced. The deck and the arm both need major overhaul to get them going again, so hence they were put in a safe place until I had time to deal with them. Now they are accessible, I think that that time has come, so watch this space for reports on what I am sure will become an ongoing saga.

After I had done several dump runs, lost a couple of arguments about disposing of some of the ‘useful’ household bits that I don’t ever recall being used, and repacked the workshop in a way that means I can access it’s contents, I can now open the door and step inside for a distance of about four feet. My tool drawers are accessible, as is part of the worktop, so all I need now is the time to sit down and tinker with it all. Wonderful things, sheds!
"...a highly capable deck that sits comfortably and against stiff competition - excellent value for money."

Acoustic Signature Storm Turntable
Awarded 5 stars - Hi-Fi World Review

VERDICT

Advanced technology combined with micro-precision engineering from Germany underpins the quality and value of these superb turntables.

Owning an Acoustic-Signature turntable could be your best long term investment in the supreme medium for music reproduction - prices from £1,632 to over £20,000.

Distributed in the UK by:

Tel +44 (0)1491 629629 | info@airaudio.co.uk | www.airaudio.co.uk
I'm an invertebrate tinkerer and ripping things apart to see how they tick can be fun. This month, ripping things apart was on my mind.

The first thing that got ripped apart was my new Mac Mini, a very short time after I had the lid off one that Item Audio sent for review, so we could get a shot of the internal modifications. Having read in a PC magazine that the latest Mini needs special tools to be disassembled I had not bothered to butcher mine and at present there is no need either — it is fast enough. However, hack-a-mac is a ritual well practised in my home, drives and memory boards being hauled from them regularly just to keep abreast of the need for speed, as well as assuage my fear of failure — drive failure that is.

So I'm well acquainted with the cramped internals of the Mini, my work computer of choice for its small size, but most importantly its silence. In front of me sits an original Mk I Mini in fact, now gathering dust having been decommissioned. It's still working fine and is reasonably speedy too, due to the SSD I installed. However, when Apple dropped support for the old Power PC processor after OS-X Leopard, I decided it was time to be less stingy, as well as smug about keeping such an old warrior alive, so a new drive-less Mini was bought, albeit with reservations about both Lion and the wisdom of no optical drive or Operating System disc. I needed a small, silent computer with which to work — meaning write — and for that a Mac Mini is the only choice. It provides a clear desktop, on which sits a big monitor to check layouts, and this environment is bathed in blissful silence.

Suspicious that Apple would choose to ensure users could not upgrade their Macs surreptitiously the way I do, I believed what I read about the Mini being a no-go area for upgraders. But you know what they say — don't believe everything you read (oh shame!). I was surprised to find that contrary to my suspicions — and those of PC journo — Apple seem to have decided to make the new Mini DIY friendly. The bottom panel screws off, allowing access to easily reached internals, including memory cards and drive. It's now a doddle to work on.

Perhaps the biggest surprise is the main board however: it is tiny. I used to marvel at the large, colourful motherboards of the PCs I have built in the past, with their densely packed chips and components. The new Mini seems to be heralding in another world. Its tiny, black painted board looks positively utilitarian and that it can do all it does — and so well — is difficult to comprehend. What it suggests is that computers are being shrunk down to utilitarian proportions and, with the Item Audio mods for example, overtaken by other roles. Since RS Components have taken 200,000 pre-orders for Raspberry Pi and the UK has gone mad for it, I read in the computer press, there must be a lot of people out there looking for a basic computing platform they can purpose for a specific role.

I hadn't expected to see a main stream computer like the Mini reduced to a music server so quickly, even to the point of its services being switched off. Perhaps I've just become used to computers as work tools in their own right, rather than subservient to specific roles, to which they are moulded. But it appears the world is changing its ideas pretty quickly. People are deciding iPads better suit their needs than stationary PCs or Macs, and sales of the former are rocketing whilst sales of the latter are in decline (well PCs, not Macs).

So we have come to the point where you buy a Mac, at twice the price of a PC I may add, and then hack it to turn it into an audio server. Bizarre! But a little amusing too.

I've never thought of a Mac as a serious music player, even if others have. The main reason is that sound quality via its S/PDIF output has not been what I would recognise as hi-fi. It sounded flat, a little turgid, lifeless and undistinguished I found when listening to it — typical of dirty digital.

And sure enough, when I measured the S/PDIF output of two old Minis (PPC & Intel) with our Rohde & Schwarz UPL analyser they were plagued by jitter. The internal conversion process of turning packetised (contiguous) audio to continuous audio output via S/PDIF, through crude sample rate multipliers locked to a CD purposed 44.1 clock, was responsible. Folk lore had it right: computers massacre audio quality and early Minis offered a prime example of this.

But the picture is forever changing. The latest Mini doesn't suffer serious jitter on its optical output our measurements show, meaning Apple have greatly improved the internal processes that feed audio to its optical output, buried within the 3.5mm headphone socket (an mini-TOSLINK adaptor is needed, available at Maplins).

But it isn't yet perfect and we will publish a letter next month from an engineer explaining why the old TOSLINK technology from 1983 we happily accept today falls way short of transmission technologies in other fields. Oh dear! I can see more tinkering ahead as TOSLINKs get ripped out and replaced by fancy modern digital optical cables in future.
Roksan Audio and Henley Designs are delighted to announce a product exchange program on a scale like no other. In 2009 we showed our commitment to our customers by increasing the warranty term on all products to 5 years. Now we're back with a CD Player exchange scheme that allows existing customers to dramatically elevate their systems in a more affordable way.

Any owners of the Caspian, Attessa or DP-1 CD Player - whether the unit works or not - can return their old model to an authorised M2 reseller in exchange for £700 off the value of a brand new M2 CD Player!* In a market where trade-in values are falling sharply, we are continuing to support our loyal customers.

The Caspian M2 CD Player is a multi-award winning feat of engineering. The stylish and innovative design delights the eyes as well as the ears, and it represents the pinnacle of Roksan's technical prowess.

For more information on your nearest reseller, contact Henley Designs.

Web: www.henleydesigns.co.uk | Tel: 01235 511 166 | Email: sales@henleydesigns.co.uk

* Offer expires: 31st August, 2012
The day was another roaring success with over 500 visitors

adam smith

I hate January. There, I've said it. As far as I'm concerned it's a dreary month with miserable weather, precious little in the events calendar and a great big Christmas credit card bill to look forward to at the end of it. Even worse, this year's January was ruined by the fact that the winter spa weekend that my wife and I usually treat ourselves to on the last weekend had to be postponed until March due to circumstances beyond our control. I honestly wondered how I'd make it.

Fortunately, February turns things around completely and this February was a shining example of audio-related wonderfulness and a complete contrast to horrible January. Things kicked off on the second weekend with John Howes' bi-annual AudioJumble which was as packed full of interesting people and even more interesting hi-fi as usual and marked something of a milestone for yours truly, as another audio holy grail was unearthed and I drove home with no less than a pair of Leak 3090 loudspeakers in the boot. Sadly, before you all get too excited, I probably am one of the few people who have bought a pair of loudspeakers famous for their wonderful Isodynamic tweeter and found them to have a small issue. Yes, that's right, those famous tweeters have been replaced by modern soft domes — aargh!

The gentleman from whom I bought them is a second hand guru of great repute so he was suitably distressed by this turn of events and is, as we speak, hunting a pair of the offending units down but if you happen to have a pair of Rank Isodynamic tweeters sitting in your loft awaiting a loving home, please drop me a line at the magazine. On the upside, even those soft domes are probably a little easier on the ear than the Mylar designs in my Leak 2075s so will definitely be auditioned thoroughly, but I'm afraid they remain unchecked to date because no sooner had I unpacked the car from Tonbridge than it was time to head west for Bristol.

I always enjoy the Sound and Vision show but this year's event had a noticeable aura of optimism that I felt had been a little subdued in the last couple of years. The demonstrations were largely excellent, established manufacturers had plenty of new models lined up for show and a couple of new names appeared, along with a couple more that were instantly familiar but that have not been seen for a good few years. You can read about the highlights elsewhere in the magazine but, suffice it to say, if you didn't make it, you missed a good one.

Finally, March arrived and the event of the year as far as I'm concerned dawned — yes, that's right, the Hi-Fi Wigwam Show 2012 at Scalford Hall! Once again I was lucky enough to be allocated a demonstration room as this year we were greatly oversubscribed for potential exhibitors. My enthusiasm was tempered slightly on arriving at the hotel on the Sunday morning to find I had been moved by them right at the last minute to what appeared to be the smallest hotel room in Leicestershire, but I girded my loins, set up and told the speakers to behave! The speakers in question were Bang & Olufsen Beovox MS150s which are - er - quite large, but I reined the volume in, they coped manfully and didn't bring any walls or ceilings down...

The day was another roaring success with over 500 visitors through the doors. My room was constantly busy and many Hi-Fi World readers came and said hello for which I am very grateful — it was lovely to meet you all and I hope you enjoyed your day. For those of you who couldn't make it, Noel has written a comprehensive show report on the website — point your mouse at www.hi-fiworld.co.uk — and on p117 in this magazine. Marvel at the sights on offer, including my fellow forum member's horn loudspeakers that wouldn't fit through the door into his room, necessitating him chopping them in half and re-building them on the day. I can only doff my hat to such dedication!

However, I have to confess to some trepidation of my own. You see, this year I decided to show a 1980s system to follow my 1970s rig from last year and, well, it had to be B&O didn't it? Unfortunately, the Beogram turntable in particular proved to be a something of a challenge. At 11pm, three days before the show, it sat on Tim Jarman's workbench with Tim and me staring at it in frustration as it had resisted five hours' worth of attempts to make it work. Eventually we called a night and I drove home to bed, pondering what other eighties vinyl spinner could replace it in my show system. I was roused the next morning by a call from Tim telling me he'd found the problem twenty minutes after I left! So the deck was collected and performed perfectly the entire day of the show, as did the Hi-Fi World Cambridge CD1, which was a huge relief.

The year is now properly off and running as far as I'm concerned, and I have a couple of weeks rest before the Audio World 2012 show at The Oastlands Park Hotel in Surrey, which I'm very much looking forward to. The move to Whittlebury Hall breathed new life into the September Heathrow show and so I'm hoping this move will do the same for the March event by offering a more pleasant and easier to access location. I'll be there on the Saturday, so hope to see some of you there. Then it'll be time to start thinking about my Hi-Fi Wigwam system for 2013, which will consist of...well, you'll just have to come along and find out, won't you?
MAY 2012
www.hi-fiworld.co.uk

INSPIRE THORENS TD160 MKII UPGRADE 92
Adam Smith listens to a set of Thorens upgrades from Inspire

TRIOLOGY 907 PHONOSTAGE 96
A dual mono phono stage is reviewed by Tony Bolton

MISSION 77 TONEARM 99
Haden Boardman on a fascinating classic tonearm

ROTHWELL RIALTO PHONOSTAGE 105
A interesting all discrete phono stage reviewed by Tony Bolton

SUNDAZED DUO
Two diverse LPs from US-based Sundazed www.sundazed.com includes a very rare find for US garage fans: the complete sixties output for Oscar & The Majestics. A highly entertaining, fuzz guitar fest of a LP sourced from Oscar’s own recently discovered archives. These fourteen tracks exude energy and fun.
Also look out for The Magic Band’s ‘1: Oxford, UK June 6 2005’, featuring veterans from the original outfit playing the Beefheart music over 2LPs.

ROCK OUT!
Music On Vinyl www.musiconvinyl.com has released a variety of rock-based LPs of late. Here’s a just a few of them.
Classic rock fans can look forward to Bachman Turner Overdrive’s ‘Not Fragile’ (1974) complete with the classic ‘You Ain’t Seen Nothing Yet’ and some impressive lead guitar from Randy Bachman.
Next is Prefab Sprout’s classic, ‘Steve McQueen’ (1985) complete with chart hit, ‘When Love Breaks Down’. Written by Paddy McLoon, the album is an eighties classic. Stylish and sophisticated, it provides songs examining the human condition.
Return To Forever’s ‘Romantic Warrior’ (1976) is the jazz rock outfit’s most popular album. Featuring Chick Corea, Stanley Clarke, Lenny White and Al Di Meola, it shows a top band at the top of its game.
Ex-Moby Grape man and tortured soul, Alexander Spence, initially saw his solo effort, ‘Oar’ (1969), relegated to the bargain bins but his LP has undergone a critical re-evaluation since when it is now viewed as a minor classic, full of folk and rock insanity. Worthy of investigation.
Also look out for the Patti Smith Group’s ‘Radio Ethiopia’ (1976), the sequel to ‘Horses’; Nina Hagen Band’s 1979 self-title release, INXS’ ‘Listen Like Thieves’ which helped the band to transform itself into a chart outfit; Alan Parsons Project’s ‘Eye’ (1979), an intriguing battle of the sexes piece featuring quality song writing and Weather Report’s superb ‘Black Market’ featuring the newly installed Jaco Pastorius.

COCTEAU COLLECTION
Eights ethereal, ambient indie soundscapers, Cocteau Twins, have a new double vinyl retrospective out via 4AD. Called ‘Stars And Topsoil: A Collection (1982-1990)’ this white vinyl, eighteen track, issue has been remastered by band member, Robin Guthrie.
GRATEFUL MO-FI

Three new albums from Mobile Fidelity www.mofi.com include a duo from ace rock jam band, Grateful Dead. 'Live/Dead', their fourth LP release was the band's first extended live recording to provide the home listener with a flavour of the group's live vibe.

'Wake of the Flood' (1973) was the Dead's first release under its own label, Grateful Dead Records. While not up to their energetic live versions, this studio album provided the raw material for future live gigs.

Also look out for 'Life's Rich Pageant' via R.E.M., a hard rocking but cleanly produced LP from 1986.

VINYL NEWS

JAMES BROWN

On its vinyl/CD dual packs format is a duo of LPs from the legendary soul man, James Brown. His first and second album releases, both issued in 1959, 'Please, Please, Please' and 'Try Me!' often approach doo wop material in style, sounding more like The Coasters than his trademark R'n'B.

Next are three electronica, avant garde instrumental albums: Karlheinz Stockhausen's 'Kontakte' (1958-60) — in which live performers were encouraged to react to tweaked percussive sounds on a tape; 'Studie I/Studie II/Gesang der Junglinge & Zyklus für zwei Schlagzeugern' (1953-59) which mixed music concrete and improv while Edgar Varèse's Integrales/Octandre/Density 21.5/Ionisation/Interpolation I, II, III', spanning the twenties and thirties utilised experimental electronic sources like sirens along with modal and atonal structures.

Doxy has released a selection of blues discs too: Robert Pete Williams' 'Free Again' (1961), an innovator in terms of his arrangements and a paroled murderer at the time he recorded this album. An intense blues singer; Howlin Wolf's 'Moanin' In the Moonlight', his 1962 Chess release; Otis Rush's 'Cobra' a survey of his creatively intense time with the Cobra label during 1956-58.

DOXY

On its vinyl/CD dual packs format is a duo of LPs from the legendary soul man, James Brown. His first and second album releases, both issued in 1959, 'Please, Please, Please' and 'Try Me!' often approach doo wop material in style, sounding more like The Coasters than his trademark R'n'B.

Next are three electronica, avant garde instrumental albums: Karlheinz Stockhausen's 'Kontakte' (1958-60) — in which live performers were encouraged to react to tweaked percussive sounds on a tape; 'Studie I/Studie II/Gesang der Junglinge & Zyklus für zwei Schlagzeugern' (1953-59) which mixed music concrete and improv while Edgar Varèse's Integrales/Octandre/Density 21.5/Ionisation/Interpolation I, II, III', spanning the twenties and thirties utilised experimental electronic sources like sirens along with modal and atonal structures.

Doxy has released a selection of blues discs too: Robert Pete Williams' 'Free Again' (1961), an innovator in terms of his arrangements and a paroled murderer at the time he recorded this album. An intense blues singer; Howlin Wolf's 'Moanin' In the Moonlight', his 1962 Chess release; Otis Rush's 'Cobra' a survey of his creatively intense time with the Cobra label during 1956-58.

WILLIAM BENNETT

Produced as two separate albums, 'Cut Hands - Afro Noise Volume 1 & 2' (Dirter; www.dirter.co.uk) is a new, avant garde electronic suite, a survey of percussive beats and the moods and the emotions that surround them: from the primitive to the futuristic. In fact, there seems to be a perennial conflict between styles, almost a dichotomy between the industrial and the tribal beats that harks back to empire on the run, a clash of percussive colonization.

New from Rune Grammofon (www.runegrammofon.com) are two 10" pieces. The first, The Last Hurrahs! 's quirky, alt.indie, 'The Great Gig In Disguise' includes Sandy Denny's 'Who Knows Where The Time Goes' and Pink Floyd's 'The Great Gig In the Sky' while Fire! With Jim O'Rourke includes two extra tracks to add to the collaborator's 'Unreleased?' album.

Finally, Elephant9's lively jazz/rock fusion 'Live At The BBC', on white vinyl, takes four tracks from their time on the Jazz On 3 programme.

...AND FINALLY

Direct from Gearbox (gearboxrecords.com) is The Don Rendell Quintet's 'Manumission BBC Jazz For Moderns', a 10"; three-tracker including Don Rendell and Graham Bond, a first ever commercial release of 1962 session at BBC Maida Vale. Also from the jazz label is Samantha Heard's 'Down And Out', a 7" single, packaged in a 7" gatefold sleeve featuring the title track and 'Delicate'.

New from Rune Grammofon (www.runegrammofon.com) are two 10" pieces. The first, The Last Hurrahs!'s quirky, alt.indie, 'The Great Gig In Disguise' includes Sandy Denny's 'Who Knows Where The Time Goes' and Pink Floyd's 'The Great Gig In the Sky' while Fire! With Jim O'Rourke includes two extra tracks to add to the collaborator's 'Unreleased?' album.

Finally, Elephant9's lively jazz/rock fusion 'Live At The BBC', on white vinyl, takes four tracks from their time on the Jazz On 3 programme.
Adam Smith takes Inspire Hi-Fi's new Thorens TD160 upgrade package for a spin.

Be Inspired

Founder of Inspire Hi-Fi, Robert Isherwood, is not merely content with making a fabulous range of his own turntables, from the entry level i2, right up to the mighty Direct Drive Monarch, nor even with the fine X100 nine inch and X200 twelve inch arms that he offers. He is feeling the need to expand his horizons even further in terms of other people's turntables, too. In this review, the Thorens TD160 MkII.

We have already been impressed by the changes that Inspire's upgrade packages have wrought on the evergreen Rega P3 turntable, plus the superbly engineered and highly comprehensive set of tweaks that have been applied to the Linn LP12. Consequently, we have been pondering at Hi-Fi World where the spotlight might fall next and we need wonder no more – step forward the Thorens TD160 upgrade package!

In fact, the Thorens is an eminently sensible choice for a number of reasons. Firstly, it is readily available — in fact, as I write this I have just entered "Thorens TD160" into eBay's search facility and twelve decks popped straight up. These ranged from rather sorry-looking early examples, via a very smart boxed, original 1605, right up to a brand new TD160HD. Many versions of the TD160 have been made over the years and they are easy to find if you set your heart on one. Furthermore, although good examples can command healthy prices, I have personally bought more than one TD160 at car boot sales for a handful of change, so there are plenty out there for Inspire to work their magic on, so stepping onto the upgrade ladder needn't cost the earth.

Finally, on a personal note, some might be surprised to learn that I have always been rather underwhelmed by the performance of the old TD160, much preferring the earlier TD150 as my bouncy belt drive Germanic vinyl spinner of choice. Perhaps at this point I should also clarify that my experience is not solely based on ropey car boot sale examples, either! As it happens I have always found the TD160 to come under the heading of eminently competent but rather safe and unremarkable, consequently I was very keen to find out exactly what Inspire's changes would bring.

Naturally, the upgrades are more than just skin deep, and are certainly comprehensively thought-out. The eminently reasonable sum of £415 buys you a very smart new
The good bits of the deck, namely the platters and bearing, are cleaned and checked before the outer platter is treated to a good buffing, onto which is then popped a new Acry-mat, rounding off with a full setup and test.

Naturally, you can spend more money if you so wish, and other recommended changes include a clear lid with Linn hinges for £140, Origin Live DC motor upgrades from £225 and a whole host of arms including the Rega RB251 or Inspire's own X100. As always, the work is carried out on a while-you-wait basis at Inspire's top secret underground laboratory (just off junction 29A of the M1...) or they can send packaging instructions for you to box your deck up, which they will then collect, fettle and return anew.

For review purposes, Inspire supplied a deck that had been treated to the full kit and caboodle of changes, and came complete with Rega RB251 arm and Ortofon Rondo Red cartridge, plus an Origin Live DC motor and PSU upgrade. Even more handily, I managed to lay my hands on a largely standard early variant TD160 with Rega RB250 for comparison purposes.

The Inspire deck looked very smart indeed and was finished to a very high standard, the only slightly discordant note being what appeared to be a rubber stick-on foot to cover the unused on/off switch hole! Might I humbly suggest a posh, printed name plate might look a little better?

The deck felt sturdy and solid in use, although I was not impressed by the high levels of mechanical noise given off by the Origin Live replacement motor, which was audible in my listening seat around three feet from the turntable in between tracks and also added faint background noise to silent grooves.

SOUND QUALITY
With the pleasant and highly musical, but rather soft and woolly performance of the old TD160/ RB250 enjoyed for a good few hours to calibrate my ears to the TD160 sound, I cued up the Inspire's TD160, sat back to listen and could only marvel once again at the transformation that Inspire have made to the deck. The sound was punchy and crisp with oodles of detail throughout the frequency range and plenty of verve to carry fast-paced music along well. Popping Mark Ronson's 'Record Collection' under the Rondo's stylus revealed that the modified deck was more than capable of carrying a tune and it picked up the bass lines very well indeed, making sure that all was sprightly and fleet of foot. The bass was not the deepest that I have encountered but the Inspire TD160 never felt lightweight or lacking in body and the upper bass had a pleasing liveness. It was also far more composed and rather less bloated sounding than the standard deck, showing that the engineering put into the modifications has not gone to waste.

In the upper registers, the Inspire really came into its own. All material, from soft classical to hard rock was delivered with insight and precision and a superb underlying crispness of the performance on a couple of occasions, and I found the deck well able to sort the instruments in a crowded orchestra very effectively. One aspect that did concern me, however, was that the sound did seem rather two dimensional and locked within the loudspeakers. Although I was hearing impressive swathes of detail, I felt that the Inspire was not quite projecting forth as well as it could be. Coupled with a sense of sterility and coldness at times, I had a strong suspicion that the deck was largely letting through the character of the unmodified Rega RB251 with which it was supplied, far more so in fact than the unmodified deck and its partnering RB250, so realised it was time to break out the toolbox...

Half an hour or so later saw the RB251 removed and an Inspire X100

whether acoustic or amplified, to their fullest extent. The soft burla of a cello almost made me jump with its sudden appearance at the forefront of the performance on a couple of occasions, and I found the deck well able to sort the instruments in a crowded orchestra very effectively. One aspect that did concern me, however, was that the sound did seem rather two dimensional and locked within the loudspeakers. Although I was hearing impressive swathes of detail, I felt that the Inspire was not quite projecting forth as well as it could be. Coupled with a sense of sterility and coldness at times, I had a strong suspicion that the deck was largely letting through the character of the unmodified Rega RB251 with which it was supplied, far more so in fact than the unmodified deck and its partnering RB250, so realised it was time to break out the toolbox...
Vinyl is black!

The Evo! What an evocative name and rightly so too! The SL-1200 evolved from a Hi Fi turntable into a DJ deck and now we turn it back into a Hi Fi turntable again! Fitted with the legendary SME 309 tonearm and the Audio Technica AT33EV your emotions will run wild. The AT33EV is itself an evolutionary cartridge hence its EV suffix and matches the SME 309 so well. We have worked with direct drive turntables and moving coil cartridges for over 30 years now and the Evo has evolved into a mature product that is quite simply a world beater. We can supply completely new units with 5 year guarantees or we can convert your own, even if you bought it used.

The SME 309 tonearm is a delight to use, to look at and more importantly to listen with! Featuring the very same tapered magnesium armube as the SME V you might wonder why this tonearm has such a low price tag. SME have a very long history and pedigree of making as they say "The best tonearms in the world" and we agree with them. This might be the last tonearm you buy, and in the long term has to be the very best value for anyone. We fit more 309s than all other arms added together, we simply love them to bits!

SME - Shelter - AT/OC9, Benz & Denon cartridges - Clearaudio - Jelco - Hadcock - SL-1200 mods
Oyaide - Cassette & reel to reel tape - Marantz - Focal - Whist Audio - A.N.T - Puresound - 78rpm - iso pods - Audiolab - Onkyo
All demonstrated in a relaxing setting with river views! Very high part exchanges & World wide mail order.

Sound Hi Fi Dartmouth Devon 01803 833366 web www.SoundHIFI.com
The new motor has a single speed nylon pulley fitted and aligned. With the Ortofon Rondo Red back on board and the stylus back in the groove once more, I was very pleased to hear that things had very much changed for the better, as the soundstage expanded to fill the space between my loudspeakers and vocalists moved properly centre-stage. Trawling back through some of the tracks I had previously been spinning seemed to back up my initial conclusion that the modifications to the deck had increased its transparency greatly, meaning that choice of partnering arm is more critical. As I've said before, the RB251 is a very fine and well-engineered budget design, but it was clear that the Inspire-modified Thorens needed something better to really work its magic.

Ultimately, the Inspire'd TD160 is still not quite as expansive in depth and scale terms as something like a Rega RP3 with TTPSU or a Pro- ject 1Xpression III, but, within its slightly more limited soundstage, it offers a better sense of precision and definition to image placement. Furthermore, the TD160 took all kinds of music in its stride and made a superb job of nearly all of it, the only exceptions I noticed being on largely piano-based cuttings, such as the Neil Cowley Trio's 'Radio Silence' album when, on occasion, the piano notes exhibited a definite unsteadiness at times, noticeably more so than on the standard, AC-motored, deck.

**CONCLUSION**

Once again, Inspire Hi-Fi have taken a classic and readily available turntable and come up with a package of modifications that breathe new life into it and put it right back to the forefront of contention against modern competition. The modified TD160 has a confidence and sure-footedness that I always found rather lacking in the original but, equally, they have not over-egg the pudding and made the deck lose its original charm and musicality. I am less convinced of the efficacy of the motor upgrades supplied with the review deck and would recommend sticking with the standard motor but, if you own an old TD160 and want to hear just how capable the old-timer can be, I would strongly recommend giving Inspire a call and splashing out on the standard package. Bear in mind that you'll need a good arm to really hear it at its best and you'll find that the results speak for themselves — there really is life in the old fella yet!

**REFERENCE SYSTEM BOX**

- Inspire X100 tonearm
- Ortofon Rondo Red cartridge
- Anatek MC1 Phonostage
- Naim Supernait amplifier
- Modified Ferrograph S1 loudspeakers

**MEASURED PERFORMANCE**

- **As delivered the TD160 MkII was running 1% fast, but speed can be adjusted. Ours varied its speed slowly by around 0.3% in all and this gave a total unweighted Wow and Flutter value of 0.2% as a long term average (meaning there was variability here). In the shorter term total weighted Wow & Flutter was a low 0.1% but this looks at variations around 3Hz due to weighting, subjectively a warbling effect. These results were about as expected from a belt drive turntable, being fairly typical.**

**NK**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed accuracy</td>
<td>+1%</td>
</tr>
<tr>
<td>Wow &amp; flutter (unweighted)</td>
<td>0.2%</td>
</tr>
<tr>
<td>Wow &amp; flutter (weighted)</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

**CONCEPTS**

- superb build quality
- value for money
- crispness and detail
- still superbly musical

**AGAINST**

- needs a good arm
- speed wobble
- motor noise
Vinyl lover Tony Bolton eulogises over Trilogy's new 907 dual-mono phono stage.

They say first impressions count, and a lot of the time it can be true of reviewing. When I opened the box containing this phonostage I was immediately impressed by the solidity and the quality of the finish of the bead-blasted casework of the Trilogy 907 phonostage. This is machined from a solid billet of aluminum that weighs 1.5kg. Inside, the unit is divided up with channels cut into the metal to provide screening for the different components from power supplies and each other. The electronics add another 0.5kg to the weight and are enclosed with a 1.5mm thick stainless-steel bottom plate.

Externally there is a small red light at the front that glows when power is on. The only user adjustable functions are hidden underneath where there are four banks of dip-switches. These control gain and cartridge loading. The former can be set for high or low output moving coils, and moving magnet. The loading options include four capacitance settings and nine choices of resistance from 70 Ohms to 47kOhms, so most types of cartridge currently available should be easily accommodated.

The circuit is of a zero feedback Class A dual mono design and features precision polystyrene capacitors in the RIAA section, along with metal-film resistors in what are described as 'critical locations'. 15A transistors are used in the power supply shunt regulators and there is an on-board inductor-capacitor to filter the external DC power supply. This is fed via a Neutrik XLR connector attached to a cable that runs from a stainless-steel case that contains the PSU. The mains flows through a custom made ultra low flux toroidal transformer that sits within a copper Faraday screen. This feeds the Mundorf reservoir capacitors through a bespoke inductor. This choke input supply was chosen because it produced the minimum of electrical noise.

Setting up took a matter of minutes, involving setting the dip switches for the Clearaudio Concept MC cartridge that now graces my Sondek, and plugging in the leads. The dual mono circuitry means that socket layout is a little unusual with the input and output for each channel being paired off on each side of the case. The earth socket sits between them.

The instructions recommend that the units are left permanently switched on and that they will take about half hour to attain their normal performance level from cold. I left them on and put a good 48 hours running-in time in before settling down to listen properly.

One of the first records that I played was a original mono copy of Roy Orbison's 'Lonely and Blue'. This record is definitely not in the best of nick, and there were a fair few pops and crackles, but despite the lack of a stereo/mono switch I was impressed with the way that the 907 seemed to
draw my focus to the music rather than the interference. I was aware of it but I was still more interested in following the tune rather than being irritated by the background noise. Side one opens with the hit ‘Only the lonely’ and the gentle way in which the rhythm caught my ear while I sat back and let the combination of guitar and backing orchestra flowed over me. Oristan seemed to stand centre stage in front of me, with a spread of music both behind and to either side of him. It sounded easy-flowing and inviting.

Moving on a few feet along my record shelves I came to Eat Static’s first LP from 1993, ‘Abduction’. Formed over 20 years ago by two members of the Oszric Tentacles, Eat Static has become one of the longer lived of the electronic music acts, still touring the UK and Europe and releasing new music. This LP introduced their long-standing alien/ space/ UFO themes that reoccur within their music, and provide the excuse for some very weird and bizarre noises that come out of their keyboards, mixed with dialogue from films, drums and guitars. I’ve seen them live on numerous occasions over the last 19 years and usually find the music has lots of power and energy that really can get a full dance floor moving. The Trilogy seemed to latch onto that energy and run with it, transmitting it through my floor moving. The Trilogy 907 unusually has warp filtering, gain rolling down below 20Hz. The filter puts a small +0.5dB lift in output around 40Hz and this is just enough to ensure the Trilogy 907 has a bit more bass heft than rivals. Our analysis shows this unusual characteristic. There is only a -3dB reduction in output at 5Hz so warps are not attenuated strongly, but the effect will be useful in lessening cone flap with warped LPs. Equalisation was deadly accurate across the audio band, lacking the slight treble lift of many stages. This will make the Trilogy 907 a tad less bright and shiny than many but more neutral in balance.

The 907 rose to the occasion superbly, providing a piano that seemed to occupy two-thirds of the soundstage, with a rich, polished tone, contrasting nicely with the violin situated just alongside the inside edge of the right hand speaker. There seemed to be enough timbral correctness to the instruments that I forgot about ‘listening’ and just sat back and enjoyed the music.

CONCLUSION

The Trilogy 907transmits music. Not all of them do; there are those that focus on rhythm, others give holographic images, whilst others offer a cooler, more academic appraisal of the sound. This one does music first, other details seem to fall into place as required, not as after-thoughts, but definitely of secondary importance to the proceedings. It ‘carries-a-tune’ well and has a way with rhythms that is almost guaranteed to get your feet moving. The build quality is first class, and the only drawback from my point of view is the inability to play mono records as well as they can be played. That apart, I regard this as a superb piece of equipment, and as such, I can recommend it for audition, pretty sure that you will come away from the experience as impressed as I have been.

Underside view Trilogy 907 phonostage.

The gold plated phono sockets are grouped in input/output pairs, because of the physical separation of dual-mono construction.

The Trilogy 907 unusually has warp filtering, gain rolling down below 20Hz. The filter puts a small +0.5dB lift in output around 40Hz and this is just enough to ensure the Trilogy 907 has a bit more bass heft than rivals. Our analysis shows this unusual characteristic. There is only a -3dB reduction in output at 5Hz so warps are not attenuated strongly, but the effect will be useful in lessening cone flap with warped LPs. Equalisation was deadly accurate across the audio band, lacking the slight treble lift of many stages. This will make the Trilogy 907 a tad less bright and shiny than many but more neutral in balance.

Gain values were useful for both Moving Magnet and Moving Coil cartridges, the maximum of +x3900 or 72dB being fine for low output MCs, whilst +x300 or 50dB is fine for MMs. This gives input overload values of 3mV for low output MC and 7mV for high output MC, and 40mV for MM.

MC and, 40mV for MM.

Noise levels were very low, moving coil returning 0.07μV of input noise (A weighted). This is low enough for hiss to be inaudible with very low output MCs.

The Trilogy 907 measures very well in all areas, it has been carefully engineered. NIK

Frequency response 5Hz-65kHz
Separation 70dB
Noise (MM, MC) 0.25, 0.07μV
Distortion 0.005%
Gain 50dB, 65dB, 72dB
Overload 12V out

FREQUENCY RESPONSE

SYSTEM USED:
Linn LP12/ Hadcock 242 Cyo/ Goldring 1022GX and Clearaudio Concept MC cartridge.
Bent Audio TAP-X Passive pre-ampl.
2 x Quad 303 power amps.
Kelly KT3 loudspeakers.

VERDICT •••••
Very well made and musical sounding phonostage.

TRILOGY 907 £1995
Symmetry C + 44 (0)1727 865488
www.symmetry-systems.co.uk

FOR  • Beautiful build and finish  • Deep and fast bass  • Good dynamics
AGAINST  • No stereo/ mono facility
### Analogue

<table>
<thead>
<tr>
<th>Brand</th>
<th>Description</th>
<th>Condition</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michell Focus One</td>
<td>Excellent 199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linn LP11/Inok</td>
<td>Excellent, boxed 899</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linn LPWAkito</td>
<td>Excellent, boxed 699</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linn I.P12 w/ Valhalla &amp; Bank Plus tonearm</td>
<td>499</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linn I.P12</td>
<td>Valhalla, 399</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graham Glee Era Gold V and PSO 1</td>
<td>Nr mint 299</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benz Micro Glider</td>
<td>Little use due in Collins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Townsend Rock 2</td>
<td>Rego tonearm, vgc boxed 499</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tom Evans The Groove</td>
<td>Excellent 1099</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thorens TD125</td>
<td>SME 3009, SME plinth, excellent 399</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technics SL111</td>
<td>SME 3009, excellent 349</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Source</td>
<td>Offboard p/s, vgc &amp; new Ortofon TA1000 899</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SME 3009/1</td>
<td>Excellent, boxed 249</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SME Scies IV</td>
<td>Rondo wiring, excellent, boxed 999</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roksan TAISI</td>
<td>A DSO, superb, boxed 1749</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rega Planar 3</td>
<td>Boxed 199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rega P3</td>
<td>St Georges flog, excellent, boxed 199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rega RP1</td>
<td>Ex demo 179</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Essential/Genie/bebut</td>
<td>All ex demo, Call</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noon Analogue Spacedeck and Bedrock</td>
<td>128 949</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well Tempered Referente</td>
<td>Supurb, 1999</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trichord Dino Mk1</td>
<td>Excelfent boxed 199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systemdek IIX</td>
<td>Vgc boxed, Call</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sugden 0128</td>
<td>149</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ouod FM3 and FM66</td>
<td>Excellent, Collins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nakornichi's</td>
<td>5 currently in stock, Call</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Digital

<table>
<thead>
<tr>
<th>Brand</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT CD7</td>
<td>Excellent Lighttightened</td>
<td>3999</td>
</tr>
<tr>
<td>AMT CD7P</td>
<td>For chrome</td>
<td>4499</td>
</tr>
<tr>
<td>Amiko Alpha 01/02</td>
<td>Excellent, used</td>
<td>849</td>
</tr>
<tr>
<td>Amiko Alpha 01/02</td>
<td>Excellent, with remote</td>
<td>849</td>
</tr>
<tr>
<td>Amiko Alpha 01/02</td>
<td>Excellent, remote</td>
<td>849</td>
</tr>
<tr>
<td>Amiko Alpha 01/02</td>
<td>Remote</td>
<td>849</td>
</tr>
<tr>
<td>Amiko Alpha 01/02</td>
<td>With black clone combi, excellent</td>
<td>849</td>
</tr>
<tr>
<td>Amiko Alpha 01/02</td>
<td>With black clone combi, excellent</td>
<td>849</td>
</tr>
<tr>
<td>Amiko Alpha 01/02</td>
<td>With black clone combi, excellent</td>
<td>849</td>
</tr>
<tr>
<td>Amiko Alpha 01/02</td>
<td>With black clone combi, excellent</td>
<td>849</td>
</tr>
<tr>
<td>Amiko Alpha 01/02</td>
<td>With black clone combi, excellent</td>
<td>849</td>
</tr>
<tr>
<td>Amiko Alpha 01/02</td>
<td>With black clone combi, excellent</td>
<td>849</td>
</tr>
</tbody>
</table>

### Audio
during this period.

### Loudspeakers

<table>
<thead>
<tr>
<th>Brand</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio Analogue Crescendo Amp &amp; CD, ex demo</td>
<td>1149</td>
<td></td>
</tr>
<tr>
<td>Audio Analogue Crescendo Amp &amp; CD, ex demo</td>
<td>1149</td>
<td></td>
</tr>
<tr>
<td>Audio Analogue Crescendo Amp &amp; CD, ex demo</td>
<td>1149</td>
<td></td>
</tr>
<tr>
<td>Audio Analogue Crescendo Amp &amp; CD, ex demo</td>
<td>1149</td>
<td></td>
</tr>
<tr>
<td>Audio Analogue Crescendo Amp &amp; CD, ex demo</td>
<td>1149</td>
<td></td>
</tr>
<tr>
<td>Audio Analogue Crescendo Amp &amp; CD, ex demo</td>
<td>1149</td>
<td></td>
</tr>
<tr>
<td>Audio Analogue Crescendo Amp &amp; CD, ex demo</td>
<td>1149</td>
<td></td>
</tr>
</tbody>
</table>
Mission’s 774 Arm, a work of engineering, if not of art.

Man on a Mission...

Famous for manufacturing some of the best budget loudspeakers over the past thirty-five years, Mission did many other things. Haden Boardman investigates one of the company’s first products; the 774 tone arm.

It is very hard to think about Mission, without thinking “loudspeakers”. By the end of the 1980s the company had become somewhat dominant with the compact Mission 70, the good reputation of the 737; the many variants of the Mission 770 loudspeaker deserve their own articles. But the company did not set off as a single product company; cartridges, tone-arms, turntables, amplifiers, stands, and of course the separate brand of “Cyrus” were all spawned from the heart of Mission Electronics.

The company opened its doors in London circa 1977. It was set up by Farad Azima, along with the well-known electronics engineer Stan Curtis (founder of Cambridge Audio). Initially the company marketed a couple of “no compromise” loudspeaker designs. The 774 arm was the third Mission product and joined the Mission ranks in 1978. A plan had been hatched, and a High End system formed around the following components: the 770 loudspeakers, 771 pre-amplifier, 772 power amplifier, 773 cartridge(s), 774 tone arm, and 775 turntable. (The later 776/777 pre-power combination is the “famous” unit with the die-cast mission logo as part of the fascia).

In the early years the company moved from London to an Industrial Estate in Huntingdon, and by the mid-1980s had a superb custom-made factory built at Stonehill to the North of the town.

Of all the early components, I would say the pre-power was the most ambitious product. The power amp isn’t heavy, it seems to bond with gravity and be near impossible to pick up! It is some 20 years since I had a play with one of these. From memory, it was a total monstrosity! It did not seem to last that long in production, replaced by the pretty 776/777, which did not last that long in production either.

In some strange ‘quirk’ Mission’s next foray into audio was the sweet little ‘Cyrus’ integrated, c. 1984. (Mr. Curtis was now departed and involved with another ‘local’ company; Cambridge Audio).

The 775 turntable is another ‘solid’ item, but with belt drive. And I have never clapped eyes on, yet alone heard one of the Moving Coil cartridges which, incidentally, came in three versions; the standard ‘LC’, 0.2 mV output, the ‘HC’, 1.7 mV high output, and the top of the line Boron based beast, the ‘SM’, with a more sophisticated stylus, and low 0.2 mV output.

The original Mission 774 tone arm was actually designed by an American John Bicht. Mr. Bicht seems a fascinating guy. Lacking in ‘university’ training, Mr. Bicht developed a unique open and self-taught mind. He came to the UK in 1965 to fulfill his personal fascination with motor sport, and by the late 1970s was working at Ogle Design Ltd, a car styling house.

A couple of quite strong articles on tone arm resonance were put into print by him, before he managed to develop the 774 tone-arm design. He sold the design to Mission Electronics before returning to the United States in 1980. Back in America Mr. Bicht launched audio company Versa Dynamics in 1986, by the way.

Visually the 774 is no oil painting. It is practical, with no extra
### Speakers

- **Cables & Connectors:**
  - Speaker cables
  - Banana plugs
  - Adaptors

- **Vocoders:**
  - Various types and applications

- **Pre-amplifiers:**
  - Class A, Class B, Class AB

- **Biasing:**
  - Linear biasing
  - Class A biasing

- **Speakers:**
  - Full range, Hi-fi, Studio, Home theatre

- **Subwoofers:**
  - Active, Passive

- **Surround Sound Systems:**
  - Dolby, DTS, Home theatre systems

- **Furniture & Stands:**
  - Speaker stands, Cabinets

### Turntables & Phono Pre-Amps

- **Tonearms:**
  - Carbon fibre, Aluminium

- **Cartridges:**
  - Moving magnet, Moving coil

- **Phono Pre-Amps:**
  - Moving magnet, Moving coil

- **Turntables:**
  - Direct drive, Belt drive

### Audio Components

- **CD Players:**
  - CD, SACD, DVD

- **DACs:**
  - Various types and applications

- **Amplifiers:**
  - Stereo, Mono, Multi-channel

- **Tape Recorders:**
  - Top-loading, 4-track

- **Power Amplifiers:**
  - Class A, Class B

### Other Items

- **Meters:**
  - VU meters, dB meters

- **Media:**
  - DVD, Blu-ray, CD

- **Software:**
  - Various types and applications

### Performance Engineering Audio

- **Professional Audio Systems:**
  - Live sound, Recording

- **Consulting:**
  - System design, Installation

- **Training:**
  - Live sound, Recording

### Contact Information

- **Phone:**
  - Tel: 01362 820800

- **Email:**
  - enquiries@basicallysound.co.uk

---

**Leak Stereo 20 full rebuild using Paper in oil caps £299.00**

**Conversion of Leak valve pre to positive including silver winders, oil filled, mesh plate £299.00**

---

**Midwinter Eastern Sounds valve/down converter £200.00**

**SME 100 £50**

**Quad ESL 57 mono £149**

---

**Price includes 2 completely rebuilt free-amps.** Call for further info.

**Claustrophobic Sounds restoring the Quad to a position where they can hold their head high.**

---

**Arcam Bryston Chord Co. Dynavector HiFiRacks Guru Pro Audio Isolabe Lehnmann Linn Naim Okki Nokki PMC Rega REL Semihinser Wilson Benesch Wireworld**

---

**The No. 1 choice for Speaker Building & speaker upgrade / refurbishment projects**

---

**See our new Website www.audio-components.co.uk**

---

**Calvey Court, Reysterworth, Norfolk. NR9 4GD**

---

**Leading brands, Help & advice, Wide product range, Phone or buy on-line FREE DELIVERY**

---

**Tel: 0118 999 0151 Email: enquiries@audio-components.co.uk**

---

**Headline Brands:**

- **Loudspeaker Repair, Upgrade or complete Restoration**
- **Loudspeaker Design to your requirements**
- **Loudspeaker Drivers and Components**
- **Loudspeaker Measurement Service**
- **Crossover design and build**
Solid base, installation easy, compatible with classic SME geometry. cosmetics for the sake of it. Rather than a head shell as such, cartridges are bolted in to a rigid mounting block formed from magnesium which is connected to a strong and very substantial alloy arm tube. This detaches and adjusts at the arm pivot. The pivot itself has incredibly strong main bearings, with low friction, tightness and rigidity of the absolute top class. The arm has incredibly low mass, less than 5.5 grams was claimed, and was suitable for use with cartridges weighing between 2 and base, if you stick to the SME cutout. Best option would have been to chop a small part of the plinth away, but in this instance I spaced the arm base a little higher.

Arm set up is a doddle. All parameters are easy to adjust: this unit has been incredibly well thought out.

I have never been a huge fan of silicon damping. My arm only came complete with the middle sized arm damper tube (there are three diameters). Luckily bending the tube out of the damping fluid provided enough adjustment.

I first came across this arm mounted on a Thorens TD 160, back in about 1988! I was struck by the clarity of the combination, despite the TD160's reputation in certain circles at the time. Still, I was impressed, and further 'playing' of the arm on other turntables revealed something quite special about its performance. Compared to its peers at the arm's 1978 launch, the 774 was no budget device. A SME 3009/III would set you back £100, a Hadcock GH122B £60, and Linn were still bolting the slightly more expensive GH228 £60, and Linn were still bolting the slightly more expensive Grace 707 to the Sondek. (£125).

The 774 cost £110 on launch. With inflation, etc, would we be adding a 'naught' on the end of those figures for a realistic price in 2012?

Skipping forward to 2012, and over 35 years of Mission Electronics history, just how good is this little arm? The example shown was checked over and re-wired by Audio Origami, and bolted to a decent quality 'period' Toshiba Direct Drive deck. With such ease of calibration, three cartridges were used: a moving magnet Nagaoka MP30, a lower compliance moving coil Ortofon MC30S (late 1980s vintage), and a new Moving Magnet, an Ortofon 2M Bronze.

The rest of the system was one of my own valve phono stages, a pair of EL84 valve based Heathkit MA12s, fitted with passive volume controls, and a set of totally forgotten about Eagle FR4 (more gutsy Fostex FE103s) four inch full range speakers in large double reflex boxes. All cables from The Chord Company (Indigo interconnect and Odyssey speaker cable). The amplifiers have been modded by yours truly, and are very familiar to me, as are the rest of the components in the system. Any acoustic hiccups from the front end would be laid very bare in this very analytical set up.

Placing a Japanese pressing of Ben Webster's 'In A Mellow Tone' on the platter was more than a pleasant surprise. This gutsy track has no less than three saxophones blowing away. It can, on the wrong set up, take your head off – but not here. Using the Nagaoka, there was a depth and detail that defined the individual instruments, displaying a superb stereo image. What stuck out was the lack of a 'sound'.

Everything resonates at some point, but the Direct Drive Toshiba deck and the little 774 seemed to be doing a very good 'black cat in a coal hole' impression: it was hard to find a 'sound' to describe. Clearly, the Toshiba's plinth was the Achilles heel of the set up. Still, I was shocked just how good this combo was. On the Miles Davis 'Kind of Blue' 50th anniversary vinyl, this all too familiar disc sounded quite exceptional, leaving the SACD re-master behind in its wake. Classical was a true delight, with very low noise and coloration. This arm truly exhibits almost silent tendencies.

Against absolute references, the overall sound was a tad thin (although this was more down to the Toshiba deck than the arm) and may be a little mid prominent. Bass is clean, fast and very accurate (more fiddling with the damping trough may have been beneficial here).

Swapping cartridges for the 

VERO board for the arm cable connector. Original arm cable worth upgrading.

10 grams.

The arm incorporates viscous damping, at the bearing end of things, adjusted by using different gauge 'paddles', and at the back of the assembly is fitted with a 'slightly' decoupled counterweight. The entire arm tube can be easily removed from the pivot, and a small 4 pin gold plug, familiar to both Hadcock and Naim Aro users, is used to provide audio connections to the outside world. Anti-skate bias is via the usual bob weight and thread.

Fitting the arm is easy enough; an effective length of 229 millimetres and the base plate fits a 'standard' SME cutting. However on my example the base of the audio connector fouled on the turntable plinth.

The arm tube and magnesium head block are easy to detach from the main bearing.
**RETRO REPRODUCTION**

**QUALITY HIGH FIDELITY & VINTAGE**

**AMPLIFIERS**
- Audio Research 200B: £395
- Audio Research 200M: £395
- Audio Research 200A: £395
- Audio Research 200S: £395
- Audio Research 200SE: £395
- Audio Research 200T: £395
- Audio Research 200V: £395

**CROSSOVERS**
- Audio Research 200A: £395

**SPEAKERS**
- Audio Research 200A: £395

**DISTRIBUTION**
- Audio Research 200A: £395

**AC BASS AMPLIFIERS**
- Audio Research 200A: £395

much heavier Ortofon MC30 didn't actually change the sound that much. The moving coil has a better stylus profile, offering greater depth and a bigger sound. Credit to the arm for keeping this low compliance cartridge in control, I did feel more mass was really needed. The new Ortofon 2M Bronze was also totally happy.

And now the good news: nobody seems to love the 774. They go for peanuts. The example shown here was purchased boxed, but missing cartridge tags, and needing the interconnecting cable reconnecting to the arm base plate. I bought it at the Tonbridge Audiojumble, October 2010, mid afternoon, after everyone had been round and had a poke at it for a paltry £50!

On a well known internet based auction site they turn up frequently and in decent condition, and still do not sell for anything like its peers do second hand. Why? I think there are four reasons: Missions’ dominance in the budget speaker market, the fluid damper, the industrial look, and the Linn Ittok, the latter, I think, being quite important. By 1980, the Linn Sondek LP12 had become the deck to own. Linn launched the Japanese made Ittok, which was massively rigid, and incredibly handsome. The

A point to watch: Sorbothane decoupling of counter-weight.

774 works well on a Linn, the ‘warm’ cuddly early LP12 benefiting the 774 accuracy. But the price had risen to £150 for a 774, and an extra £50 would buy you an Ittok at the time.

Is the early Ittok superior to the 774? Now that is a pickle! I can confidently say the 774 bearings stay the course longer, and in my opinion, a much safer second-hand bet, let alone the staggering difference in second-hand price.

Of course Mr Bicht was back in America by the time the Ittok was launched, and had no further influence at Mission.

By 1983 the original 774 had disappeared and the ‘Mk II’ 774LC had been launched; it was a fairly stock Japanese Jelco sourced device with a Mission badge on it. Then a joint effort from Mission with the GB Tools-built (Zeta) gimbal bearing 774SM appeared. Although some say – but I have yet to play – the ‘ultimate’ Mission arm was the Mechanic, with incredible build and science fiction looks...

All the same the 774 is an absolute bargain at the moment. The bearings seem to last forever, they are easy to set up, and replacement arm tubes and head blocks are available with increased length and mass to suit lower compliance cartridges. The Sorbothane decoupling on the counterweight can deteriorate with age but is replaceable.

The 774 suits all but very low compliance cartridges and there seems a decent second hand supply. Do not be put off by the slightly crude looks or the fiddly silicon damper (simply don’t use it). Its low mass suits both suspended and rigid decks.

For more help on Mission 774s: general arm servicing from http://www.audioorigami.co.uk/. Replacement arm tubes / head blocks and upgraded counterweight parts from John Choong at http://www.exact-audio.co.uk/.

The complete deal: John Bicht designed Mission 774.
**ISOkinetik Audio Enhancement**

Take your Rega turnover to a higher level of perfection transform your standard Rega to a deck which will compete with others priced over £2,000.

**Rega upgrades as reviewed in Hi-Fi World May 2012 www.hi-fiworld.co.uk**

- **Best bong for buck Tho 150 weight Rega tonearm counterbalance £49.99**
- **ISOtone Cardas Raga arm rewire kit £99.99**
- **ISOdrive Rego, Linn, Systemdek, Thorens PSU £329.99**
- **Improved kit from £99.99**

_Neville Roberts HI Fl World Feb 2010_

"There is no doubt that each item make a positive contribution to the overall sound produced"。“Best bong for buck The ISO-weight ui under £50 is the first thing to have on your shopping list: it’s great value and a surprising improvement” Neville Roberts Hi Fi World

**Audio designed to combat phase distortion**

www.TelluriumQ.com

**Tellurium Q Audio designed to combat phase distortion**

Find out why more and more people are talking about Tellurium Q products. Don't just believe all the incredible reviews, test our products for yourself against any other thing in the same price range.

Find out how your music can really sound and talk to your nearest Tellurium Q dealer now.

---

**Midland Audio X-change**

Midland Audio X-change are looking for All high end audio separates best prices paid for good examples.

- **bel canto Pre3 S/H**
- **Jadis KT90 Valves x 4 BNIB**
- **Apollo 80cm single column Stands S/H**
- **Spectral DMC 15SS BNIB full warranty**
- **Rega P5 Cherry x demo**
- **Melody 20 power amplifier S/H**
- **Sonus Faber Cremona Elipsa Maple x-demo**
- **Clarke CDP300 Universal Player S/H**
- **Krell Evolution 302 black x-demo**
- **Melody SP3 MKII valve valve S/H**
- **McGraw-Tech CDP 700 Universal Player S/H**
- **Rega P3-24 Green gloss x demo**
- **Melody SP3 MKII valve valve S/H**
- **McGraw-Tech CDP 700 Universal Player S/H**

---

**MIDLAND AUDIO XCHANGE**

MIDLAND AUDIO XCHANGE are looking for All high end audio separates best prices paid for good examples.
Chip chop

Rothwell have given silicon chips the chop in their neat Rialto all-discrete phono stage. Will this move it ahead of competitors? Tony Bolton investigates.

Nowadays we take the concept of the separate phonostage for granted. Indeed there are few amplifiers outside of the budget and lower mid-range price points that are supplied with such things built in. Even then, they are usually only designed for moving magnet cartridges. But it was not always so. Back in 1989 onboard phonostages were de rigueur for any self respecting amplifier. That year, Rothwell Audio, based in Bolton in Lancashire, launched one of the first free-standing phonostages upon an unsuspecting public, and included valves in the specification - something akin to near heresy in those far off solid-state days.

The phonostage market is now quite substantial, and last October, Rothwell’s latest model, the Rialto became available. It is a compact unit, measuring 60 x 92 x 155mm ( h x w x d) and weighing in at a mere 570g so can be tucked away without occupying too much precious shelf space. The casework is made from steel, the lid and sides being removed via the four screws at the sides, to allow access to the push button gain controls. These have a moving magnet and moving coil setting, impedance being preset at 47xOhms and 100 Ohms respectively. Andrew Rothwell decided to eschew the flexibility of variable gain and impedance settings because he felt that the extra switch gear impeded the signal and degraded it’s quality. By the same token the gain buttons are mounted internally to shorten the signal path. The passive RIAA stages uses 20 Wima polypropylene capacitors and the MC step up is done by Zetex high current, low noise transistors in a pure Class A circuit that avoids negative feedback. The MM section uses discrete transistor gain stages; there isn’t a silicon chip in sight, unlike nearly all competitors. Only the Ant Audio Kora 3T was all-discrete like this.

The power supply is a simple wall wart type that outputs a relatively high 24V DC and plugs in at the back of the phonostage alongside the signal inputs and outputs, and the earthing post. The front is finished in brushed alloy and ornamented by a rather bright blue LED.

I gave the Rialto 48 hours of running in before settling down to ransack my record collection. First up was Menuhin and the Philharmonia playing the Mendelssohn and Bruch violin concertos. I was immediately struck by the level of detail in the sound and the precision of the imaging. The sound filled the space between the speakers, with some extension forward onto the rug in front of the speakers. There was quite good depth to the stage area as well, enough to let me picture a three dimensional ensemble of musicians in front of me. I was left with an overall impression of neatness. The soundstage was defined and tidily presented, as were the varying tones of the different musicians. There was a high level of detail in the low-end, with a good sense of texture and weight to the instruments. The mid-range was clear and detailed, with good separation between the different instruments. The high-end was well balanced, with a good sense of detail and transparency. Overall, I was very impressed with the sound quality of the Rialto.

Inside the Rialto are push-button MM/MC switches on each channel (left) and discrete transistors. 

Inside the Rialto are push-button MM/MC switches on each channel (left) and discrete transistors.
Welcome to Rock Solid Sounds
a UK retail outlet for some of the finest HiFi products from around the world.

Viewing is by appointment only.
Parking is free.
instruments of the orchestra. There seemed to be a good balance across the tonal spectrum, although I did feel that the lower bass strings, and the drums were possibly lacking a little weight and punch. They had presence but could have done with a quick trip to the gym to gain just a couple of pounds here and there. Overall though, a very creditable performance for a phonostage at this price point.

Suitably impressed I carried on along my record shelves, stopping with Nancy Wilson. She ranks as one of my favourites '60 female singers (and with over 70 album releases, a highly successful one). She had, what one reviewer described as 'a voice coated in honey'. While I like that aspect of her voice, I also enjoy the slightly sassy 'yeah right' that can creep into it when the lyrics are appropriate. Her style is smooth: vocals with a rather lush style of '60s jazzy orchestral backing. It was obvious from the first notes that the Rialto considered itself on friendly turf. The music flowed easily and smoothly, the band spread around the soundstage. Nancy out front, sometimes crooning, other times exercising a little attitude, but always beautifully presented, the subtleties of her intonation coming through along with her immaculate timing of the lyrics.

I stayed in a jazz frame of mind for the next disc, 'Time Further Out', where the Dave Brubeck Quartet explore even more unusual time signatures than in their previous LP, 'Time Out'. The best known track is 'Unsquare Dance', complete with drummer Joe Morello's shout of delight at having successfully navigated the challenges of staying in 7/4 time. This is an early mono CBS pressing that has been very well loved by it's previous owner, and here I would have enjoyed it all the more if I had been able to switch the phonostage to mono operation. Since I couldn't, I had to put up with a bit more surface noise than I would have liked, but the way the music was handled was very good. However, I felt that Eugene Wright's bass was a little insubstantial in the lower registers.

So far, the Rialto had displayed unshakable good manners when faced with 'civilised' sounds, so I put on a copy of 'The Rolling Stones In Concert' recorded at the Royal Albert Hall in 1966 and the second LP at Madison square Gardens in 1969. It is one of those records that sizzles with the band's energy, even if, like so many live recordings, the tonal balance is a little questionable. Here I think I found the Rialto's Achilles heel. It did a competent job of playing the tracks, but seemed to be a bit restrained in pumping out the rawness of the performance that can make music like this feel so vital. I could liken it to the band having their mothers in the audience and just toning it down a little because of that.

I tried this record later on when playing the Goldring 102GX cartridge through the Rothwell and found the punchier MM sound helped overcome this slight feeling of reticence, but the Rialto would not be my first choice for playing rock music, or anything that had equally uncouth sounds in it. I also noted that the deep, dark bass that the Goldring 1000 series cartridges produce seemed to add a little more substance to the lower notes and suited the Rialto.

I used the word 'neat' earlier and this is how the Rialto presents music. Feed it with tunes from the classical, jazz and folk repertoires and it plays them with ease and makes listening to them a satisfying experience.

I would exercise a bit of care in cartridge matching. The gain levels in the Rialto are moderate, so very low output cartridges such as the Denon DL304 tested elsewhere in this issue should be avoided (I tried it briefly and had to turn the volume up quite a way beyond the normal levels, so hiss could become a problem). The majority of modern MCs have a high enough output for this not to be too much of a issue.

Overall a very good phonostage for the money, that offers classy sounds for the pounds, but it is a bit genre dependent, and will not suit all cartridges. Certainly unusual, distinguished in its own way and worth an audition though.

**VINYL SECTION**

**MEASURED PERFORMANCE**

- The Rothwell Rialto has a modest x126 (42dB) gain with Moving Magnet cartridges and x1283 (62dB) with Moving Coil cartridges. It will need to be used with a preamplifier having plenty of gain or an amplifier with a sensitive input of 200mV or better. Gain has been kept down to avoid output overload, because maximum output swings is low at 4V. This translates to input overload values of 31mV for MM and 3mV for MC cartridges, just enough to avoid problems.

- Equalisation gives a bass light characteristic, the 318/3180μs curve being slightlydown (-1dB) on maximum gain at low frequencies. As a result the Rialto will sound a tad bass light against rivals.

- Noise levels were low, but not the lowest available. Equivalent input noise for MC calculated at 0.13μV, where -4dB lower is possible (0.08μV) with the best stages. Moving coil cartridges with very low output are not suitable because of this gain/noise limitation, but that does not include Ortofon for example.

**SYSTEM USED:**

Linn LP12/ Hadcock 242 Cryo/ Clearaudio Concept or Goldring 1022è Bent Audio TAP-X passive pre-amp. Kelly KT3 loudspeakers.

**VFRDICT**

- no mono/ stereo switch
- suits classical and jazz
- mellowand easy going
- well mannered MC and MM phonostage of all discrete design. Lovely sound, but with some limitations.

**FOR**

- mellowand easy going
- good imaging
- suits classical and jazz

**AGAINST**

- lacks bass weight
- no mono/ stereo switch

**SYSTEM USED:**

2 x Quad 303 power amps. Clearaudio Concept or Goldring 1022è Bent Audio TAP-X passive pre-amp. Kelly KT3 loudspeakers.

**VFRDICT**

- no mono/ stereo switch
- suits classical and jazz
- mellowand easy going
- well mannered MC and MM phonostage of all discrete design. Lovely sound, but with some limitations.

**FOR**

- mellowand easy going
- good imaging
- suits classical and jazz

**AGAINST**

- lacks bass weight
- no mono/ stereo switch

**SYSTEM USED:**

Linn LP12/ Hadcock 242 Cryo/ Clearaudio Concept or Goldring 1022è Bent Audio TAP-X passive pre-amp. Kelly KT3 loudspeakers.

**VFRDICT**

- no mono/ stereo switch
- suits classical and jazz
- mellowand easy going
- well mannered MC and MM phonostage of all discrete design. Lovely sound, but with some limitations.

**FOR**

- mellowand easy going
- good imaging
- suits classical and jazz

**AGAINST**

- lacks bass weight
- no mono/ stereo switch

**SYSTEM USED:**

2 x Quad 303 power amps. Clearaudio Concept or Goldring 1022è Bent Audio TAP-X passive pre-amp. Kelly KT3 loudspeakers.

**VFRDICT**

- no mono/ stereo switch
- suits classical and jazz
- mellowand easy going
- well mannered MC and MM phonostage of all discrete design. Lovely sound, but with some limitations.

**FOR**

- mellowand easy going
- good imaging
- suits classical and jazz

**AGAINST**

- lacks bass weight
- no mono/ stereo switch

**SYSTEM USED:**

Linn LP12/ Hadcock 242 Cryo/ Clearaudio Concept or Goldring 1022è Bent Audio TAP-X passive pre-amp. Kelly KT3 loudspeakers.

**VFRDICT**

- no mono/ stereo switch
- suits classical and jazz
- mellowand easy going
- well mannered MC and MM phonostage of all discrete design. Lovely sound, but with some limitations.

**FOR**

- mellowand easy going
- good imaging
- suits classical and jazz

**AGAINST**

- lacks bass weight
- no mono/ stereo switch

**SYSTEM USED:**

2 x Quad 303 power amps. Clearaudio Concept or Goldring 1022è Bent Audio TAP-X passive pre-amp. Kelly KT3 loudspeakers.

**VFRDICT**

- no mono/ stereo switch
- suits classical and jazz
- mellowand easy going
- well mannered MC and MM phonostage of all discrete design. Lovely sound, but with some limitations.

**FOR**

- mellowand easy going
- good imaging
- suits classical and jazz

**AGAINST**

- lacks bass weight
- no mono/ stereo switch

**SYSTEM USED:**

Linn LP12/ Hadcock 242 Cryo/ Clearaudio Concept or Goldring 1022è Bent Audio TAP-X passive pre-amp. Kelly KT3 loudspeakers.

**VFRDICT**

- no mono/ stereo switch
- suits classical and jazz
- mellowand easy going
- well mannered MC and MM phonostage of all discrete design. Lovely sound, but with some limitations.

**FOR**

- mellowand easy going
- good imaging
- suits classical and jazz

**AGAINST**

- lacks bass weight
- no mono/ stereo switch

**SYSTEM USED:**

2 x Quad 303 power amps. Clearaudio Concept or Goldring 1022è Bent Audio TAP-X passive pre-amp. Kelly KT3 loudspeakers.

**VFRDICT**

- no mono/ stereo switch
- suits classical and jazz
- mellowand easy going
- well mannered MC and MM phonostage of all discrete design. Lovely sound, but with some limitations.

**FOR**

- mellowand easy going
- good imaging
- suits classical and jazz

**AGAINST**

- lacks bass weight
- no mono/ stereo switch
**SPEAKERS**

- Tammy Kensington SE speakers, our demo units. (£7999) only £5999
- Yamaha S605 in MINT condition, boxed with instruction book, cost new £20000 only £9999
- Audio Limited

- New Furutera Audio Lab Supreme/S speakers from Japan with HEIL AMT tweeters (RRP £7995) £5499
- Tannoy Kensington SE speakers, our demo units. (£7999) only £5995
- Tannoy Stirlings, ex. cond. £1495
- NEW Furayama Audio Lab Supreme/S speakers from Japan with HEIL AMT tweeters (RRP 7995) £4995
- Yamaha Soave 1’s in MINT condition, boxed with instruction book, cost new £2000 only £995

**RE-AMPS**

- VTL 2.5 pre amp with phono input (cost new £3200)
- Audio Innovations 2020 audio block, boxed
- Trilogy 959 pre amp, ex. demo, mint, full man’ warranty, (£4995) only £3499
- Audio Note Zero Remote controlled pre amp, MINT
- Audio Note Zero pre amp, Ex cond’.

**AMPLIFIERS**

- Reimsy NAP-777 power amp, as new, 6 months old, cost new £25,000 only £12,495
- Wax 3085 monoblock, black, absolutely superb
- Audio Note DOR 7 SE with phone input

**CD PLAYERS & TRANSPORTS**

- Accuphase DP-75V CD player, MINT/BOXED, cost new £12,495 £10,000 offered for £4995
- Boulder 1012 pre amp with built in DAC, absolutely superb, £1895
- Musical Fidelity A1008 CD player, superb/boxed

**ARTRIDGES & TONEARMS**

- Michell Gyrodeck SE, superb cond’ boxed
- Tiern Turntable wall mount turntable stand
- Koetsu Black MC cartridge, new/unused
- Selection of high end MC cartridges at discount prices.

**MISCELLANEOUS**

- Accuphase T-109 Tuner, pens’ the best tuner ever made.
- Townshend 3 her S/Sink stand
- STAX SR-303 headphones with energizer
- Yamaha 1.5 mw, balanced interconnect

---

**The Electric Multiroom**

Design & Installation Specialist in Balanced Electrical Circuits

The Electric Multiroom are providers of bespoke electrical infrastructure, for home cinema, multiroom audio, multiroom video, lighting systems, integrated security, practice, rehearsal rooms, home automation and balanced electrical circuits.

Operating throughout the West Midlands and UK.

Contact us:
- Phone: 02476 457081
- Mobile: 07999 909961
- Email: Support@theelectricmultiroom.com

---

**TO ADVERTISE HERE**

PLEASE CALL DEBI SILVER ON

+44 (0) 1723 500 435 +44 (0) 7966 843536

OR EMAIL: debisilver@hi-fiworld.co.uk
ARCAM adds four NEW models to its rSeries

rPAC
USB DAC / HEADPHONE AMP
£149

drDock
DIGITAL DOCK FOR iPOD / iPHONE / iPAD
£199

rLink
OPTICAL / COAXIAL DAC
£149

rBlink
BLUETOOTH DAC
£139

VISIT OUR WEBSITE
for the latest offers and news, as well as the convenient option to order many products on-line or click to reserve before you travel.

www.SSAV.com

PLEASE NOTE: SOME BRANDS/PRODUCTS ARE NOT AVAILABLE AT ALL STORES. SPECIAL/ADDED VALUE OFFERS ARE NOT IN CONJUNCTION WITH ANY OTHER OFFER (NICE AO). ADVERT VALID UNTIL 04/05/2012. E&OE

* THESE STORES ARE EITHER LICENSED OR FRANCHISED AND OPERATE UNDER A LICENCE AGREEMENT TO SEVENOAKS SOUND & VISION.
REAL STORES
Sevensoaks Sound & Vision have stores nationwide - each carries the very best in home cinema and hi-fi equipment on display, ready for you to watch, listen to and compare in our dedicated demonstration rooms.

REAL PEOPLE
Our staff are friendly, knowledgeable and passionate about music and film and the equipment needed to get the most out of your collection. They will be delighted to assist you in making the right selection to ensure you enjoy your system for years to come.

REAL PRODUCTS
A wide selection of products from the world's leading manufacturers is in stock and available for you to take home. We also offer a delivery and installation service as well as a convenient on-line click and reserve option for many of our products.

REAL VALUE
Fantastic value for money is our aim. Although we remain independent, you'll be pleasantly surprised just how competitive we can be - with the added benefit of seeing, hearing and touching the product before you buy, and someone to help if things go wrong.

FOR OUR LATEST PRICES AND OFFERS VISIT WWW.SSAV.COM

LEEMA ELEMENTS CD PLAYER / AMPLIFIER
The Elements Series is the latest in the line of Leema high-performance audio equipment.

MARANTZ CD6004 • PM6004 CD / AMPLIFIER
This award-winning CD player and amplifier is the result of extensive research and development by Marantz's engineering team, under the direction of Grand Ambassador Ken Ishiwata.

DENON CEOL RCD-N7 CD NETWORK RECEIVER
This network CD/IPod receiver lets you set your iPod or iPhone to its dedicated dock and enjoy music with high-quality sound or listen to Internet radio.

REGA RP I TURNTABLE
Excellent build quality, reliability and ease of use combine to make the RP I a product that will offer a lifetime of musical enjoyment.

EARMA ELEMENTS CD PLAYER / AMPLIFIER
The Elements Series is the latest in the line of Leema high-performance audio equipment.

CASPAN M2 CD / AMPLIFIER
The M2 amp boasts 85wpc and live the inputs while the matching CD player delivers the sort of performance that will satisfy both the music aficionado and the hi-fi enthusiast.

MARANTZ M-CR603 CD NETWORK RECEIVER
Features CD playback, a DAB/DAB+/FM/AM tuner along with a USB connection and network capability via its ethernet port.

REGA RP I TURNTABLE
Excellent build quality, reliability and ease of use combine to make the RP I a product that will offer a lifetime of musical enjoyment.

MARANTZ M-CR603 CD NETWORK RECEIVER
Features CD playback, a DAB/DAB+/FM/AM tuner along with a USB connection and network capability via its ethernet port.

ARCAM FMJ CDI 7 • FMJA18 CD / AMPLIFIER
Arcam's FMJ products combine sleek design, flexible connectivity and sound quality far beyond that of budget separates. Available in a black finish to seamlessly blend with any style of décor.

ARCAM SOLO MINI CD RECEIVER
The award-winning Solo Mini provides premium performance in a discrete and stylish unit.

ARCAM FMJ CDI 7 • FMJA18 CD / AMPLIFIER
Arcam's FMJ products combine sleek design, flexible connectivity and sound quality far beyond that of budget separates. Available in a black finish to seamlessly blend with any style of décor.

ARCAM SOLO MINI CD RECEIVER
The award-winning Solo Mini provides premium performance in a discrete and stylish unit.

PRO-JECT XPRESSION III TURNTABLE
Features an improved, carbon-fibre tonearm, superior isolation feet and comes supplied complete with a factory-fitted and aligned Ortofon 2M Red cartridge.
**Spendor A-Line**

These high performance, floorstanding speakers combine smart styling with natural veneer finishes. Each model benefits from important advances in Spendor's drive unit technology, cabinet design and crossover engineering.

**Monitor Audio Gold GX**

Monitor Audio's new Gold GX speakers use technology that has filtered down from the flagship Platinum PL range. The range comprises two standmounts, two floorstanders, two centre speakers, a pair of surround speakers and a single subwoofer.

**KeF Audio R Series**

Using trickle-down technology, from the company's flagship Blade speakers, the R Series comprises standmount, floorstanding, centre, surround and subwoofer models.

**Bowers & Wilkins PM1**

This luxury compact loudspeaker is the latest in a long line of Bowers & Wilkins stockroom mini monitors. It offers an extremely high-quality audio performance and features several technological innovations including a new tweeter and groundbreaking cabinet design.

**PMC Twenty Range**

The Twenty series is the next generation of elegant, handcrafted British loudspeakers that follow in the lineage of worldwide acclaimed PMC designs. The 4 models use PHC's innovative ATL™ technology, providing a supremely rich and detailed performance ideally suited to all styles and sizes of interior.

**Sonos - The Wireless Hi-Fi System**

Play your digital music all over your house without a PC in every room. The award-winning Sonos lets you play your favourite tunes all over the house and control them from the palm of your hand. You can even play different songs in different rooms.

**Cyrus Streamline Music Streamer**

This compact all-in-one music system is the perfect choice for any room. Based upon the Stream XP but complete with a high performance stereo power amplifier built-in. Includes the stylish and intuitive n-remote control.

**Marcantz NA7004 Network Audio Player**

This AirPlay® compatible player lets you connect to all your favourite music, whether it's from your PC, external hard disc or as an FM / DAB radio station broadcast or even on the other side of the world via Internet Radio.

**Q Acoustics 2020i Speakers**

Medium sized bookshelf speakers with extended bass, open mid range, astonishing transient response and exceptional high frequency clarity.

Please Note: Some brands/products are not available at all stores. Special/added value offers are not in conjunction with any other offer (NCVVA00).

Advert valid until 04/05/2012 E&OE.
This is a comprehensive directory of Hi-Fi Dealers throughout the UK and Ireland.

BERKSHIRE

LORICRAFT AUDIO
Loricraft Audio is now open for visitors but please call to arrange for a visit. You can buy all our products directly from us or through your local dealer. Our internet shop site can take direct orders for our turntables and accessories! Loricraft Audio, The Piggery, Mile End Farm, Wantage Road, Lambourn, Berkshire, RG17 8UE Office Phone/Fax: +44 (0)1488-72267 Email: terry@garrard501.com website: http://garrard501.com

STUDIOAV LTD
44 High Street, Eton, Berkshire SL4 6BL Tel: 01753 631000 Email: sales@studioay.co.uk www.studioay.co.uk We are Berkshire's premier Linn dealer (complete range) and LP12 specialists.

BRISTOL & BATH

THE RIGHT NOTE

V'AUDIO HI FI CONSULTANTS
36 Druid Hill, Stoke Bishop, Bristol BS9 1EJ Tel: 0117 968 6005. Website: www.v-audio.co.uk Email: icvhifi@yahoo.co.uk

CORNWALL

BIGEARS AUDIO
To find a system that will allow you to hear the music instead of the equipment phone Bigears Audio, here you will find an interesting array of new and good quality used equipment! My intention is to have satisfied customers whatever their audio preferences. Naim dealer for the South West. Email: chrisbirchley@btinternet.com. Tel: 01736-740421

ESSEX

ROCOCO SYSTEMS & DESIGN
Essex/London Linn Specialist Tel: 01371 856 407 - 0207 454 1234 www.roccosystems.com We have over 30 years in entertainment solutions. We can give you expert advice on your Linn Hi-Fi, Multi-room AV and Home Cinema systems. P/E, ex-demo and used Linn available, Demos by appointment. Home Demos welcome. Authorised dealers for Arcam, Artcoustic, Chord, Denon, Linn, Lutron, Kaleidescape, Marantz, Oppo, Runko, Systemline, Sonos, Sim2. Linn Service & Repairs

LANCASHIRE

HOUSE OF LINN MANCHESTER
Telephone: 0161 766 4837 Email: info@houseoflinn.com www.houseoflinn.com The Linn specialists. Independently owned by former Linn staff. Straightforward, professional expertise with demonstration, sales, installation and support for the Linn range of components and systems. The listening experience is so good that demonstrations can last for hours. Discover how we make music sound real in your home! Appointments only.

LONDON

THE CARTRIDGE MAN LTD
88 Southbridge road, Croydon CR0 1AF Telephone: 020 8688 6665 www.thecartridgeman.com Email: thecartridgeman@talktalk.net. UK Distributor: Haaudio Distribution Makers of the prize-winning range of MusicMaker cartridges and other desirable
audio accessories. We also have a cartridge refurbishing service and rebuild classic valve equipment to the highest standards.

"It doesn’t have to cost an arm and a leg - but there is no such thing a free lunch, either."

MY AUDIO DESIGN
35 Whishall, London, SW1A 2BX
Tel: 020 7839 8880 / 07782 137 868
E-mail: sales@madengland.com
Website: www.madengland.com
E-Shop: www.shop.madengland.com
We offer MAD, Benchmark Media, SONOS, WB & Dynavector

MANCHESTER

AUDIO COUNSEL
26 High St Cheadle SK8 1AL
www.audio-counsel.co.uk
Tel: 0161-491-6090
Email: dave@audiocounsel.co.uk
Tel: 08448 22 11 15
Email:sales@15audio.co.uk
15 AUDIO
15 AUDIO
THE AUDIO ROOM
2 George Street, Hedon, Hull, HU12 8JH
www.audio-counsel.co.uk
Tel: 01482 457926
Email: clive@soundcinergy.co.uk
SOUND CINERGY
37 high street, Aldridge, WS9 8NL
Quality hi-fi and home cinema from black rhodium, chord co, exposure, focal, linn, marantz, michell, monitor audio, mordaunt short, nad, okki noki, ortofon, project, rel, roksan, themescene, trichord, vhi. Check our website for ex dem and secondhand bargains, free car parking, tues - sat 10 - 5.30

UK

10 Menapian Way
10 Menapian Way
ARDHOWEN HIFI
10 Menapian Way
Enniskilien, Fermanagh, BT74 4G5
www.Ardhowenhifi.com
07800 575070 Tom

113
WANTED FOR enthusiast:
Quad 2 amps, pre-amps, Tuners and related spares. Any literature & valves would also be appreciated. I am also looking for a single Radford Auditorium speaker. 0117 9467188 slkw@btiernet.com

Krell $300i integrated amp. 200 WPC. boxed, mint, £1200 ($2600). Project 2.7 turntable and arm, glass platter, £250. Musical Fidelity X-1PS phono stage £50. Wanted: Philips DVD 9635A DVD/SACD player. Tel: 01737 350 711

CYRUS III pre-amp, 50 watts, M Block power amp plus two power supplies, black, little used, one owner from new. Mint condition. Full demonstration. No splitting. £640. Tel: 01455 220 214 (Coventry)

WANTED: CYRUS 7 amp, silver finish, must be mint condition, boxed with instructions and all accessories. Please contact 020 8524 1099 or 07523 722 165


Mission 753 speakers, black, 4 drivers plustweetor. Spikes. £200. Also Yamaha Decoder Dolby S.1, black, DSPE 390, mint condition, £50. Tel: 01455 220 214

ELAC CL 310i jet compact standmount speakers, metal cabinets, silver, 4 ohm, 50-150w, B6dB, original box and manual, excellent condition, £295. Tel: 01865 823 112

CYRUS PRE VS2 preamp, brushed black, excellent condition, boxed. £350. Tel: 02476 440058

NAIM 250-2 amplifier, Serial 206266, mint, boxed, very little used. Offers. Tel: 01825 722 936 (Sussex)

NAIM CD 3.5 and FlatCap for sale. Both units in excellent condition, boxed, manuals etc. New remote, interconnects included. £500. Tel: 07846 675 141 (Northants)

Magnaplanar MG 1.5 QB. Black ash, mint condition, £500. Tel: 078172 41911 (Astwood Bank, Worcestershire)

Arcam A90/990 integrated power combination amplifiers. Arcam CD192 CD player, boxed. £1400 ono. Tel: 01362 854 227 (Norfolk)

Quad ELS 2805 black, as new condition, sublime experience, £725. Tel: 01952 728 773 (Shropshire)

Audio Research VS55 integrated all valve amplifier. Mint condition, original packing, manuals, remote etc. Serviced and revalved by Absolute Sounds 24.02.12. Receipt to prove service warranty free. £1500. Tel: 020 8394 9831 or 07722 997 448

SOLID-TECH Isoclear feet (4) £35. QED Qonduit RDH6 mains distribution block, £95. Abbey Road phono interconnects by Moving Air, £45. Tel: 0151 677 3521 (Wirral)

Yamaha CD5100 CD player. Mint condition. Selling for £450. Also Musical Fidelity A3 amplifier. Fault on remote so selling at low price, £100. Tel: Bob 07845 395 969

WANTED: Metal cassette tapes: Maxell or TDK. New or little used. Tel: 01395 576 644 or Email: jmichealbritain@yahoo.com

Rowntree Acoustics omnimount speakers in excellent condition with cases and manuals. £6400 new, £2900 ono. Buyer collects. Tel: 0116 215 435 or 07817 365 393 (Leics)

Universal AVO meter, Model 7, with instructions on back. Excellent working order. £50 ono. Please ring for details 0115 975 4070 (Nottingham)

Kimber KCI patchcords interconnects. Im pair, 1/4 jack to XLR. Plugs shielded. Hardly used. As new RRP £120. £60 including post. Other items. Call Mike between 11 am to 5.30 pm. 01902 884 694

Sumiko Blue Point Special Evo III. Only two hours use then turnedtable sold. Hi-Fi Choice favourite 2010. Cost £230. Accept £100 or P/X for Quad 405 or similar amp. Tel: 01277 219 639 (Essex)

Bose SoundDock 10 Excellent condition and working order 6 months old £325 ono. Please call Tyron on 07982865638

Revox B77 Mk2, 4 track tape recorder, perfect working order, lightly used, unmarked condition, Nav adaptors, original box and manual. £350. Tel: 020 8395 9831 or 07722 997 448

Miller Kreiser sub speaker, active powered, £75. £250. Also Mission surround theatre center speaker plus two rears. Black ash, One owner. Demonstration. £150. Tel: 01455 220 214 (Coventry)

Linns K40 bi-wire speaker cable, 266. £70. Kenwood 3090 MiniDisc, £60. JVC QL7 DD turntable. £350. Trio K6 headphones, 1970’s, free HFV Supplements, £25. JVC TX22L tuner, £30. Tel: 01708 457 691

Balanced Audio Technology BAT VKDS 5E CD player, uses four legendary 6H30 valves, XLR & RCA outputs, excellent performance and as new. CW remote and spare valves. Triple packed. Will accept £1800. Non-smoking flat. Audio Physik Spark One smallish sensitive floorstanders, outstanding dynamic range and soundstaging etc. Black, suit lowish power valve amplifiers, (2k) £450. Technics SL1210 Mkll, good condition, plus Technics SL500 DD DS2’s. £175 for the two (wife pleasing) Shalom 07951 553 091 (London N.W.)
AVI REFERENCE S2000 CD player with remote, £300. Audiolab DAX, £250. 2 Kimber power cables, £40. Nordost Moonglo II digital interconnect. £60. Or lot for £600 or nearest offer. (Collect). Tel: 020 8590 8530

ROKSAN RADIUS 5 turntable for sale with Origin Live Rega RB600 and Goldring 1022 cartridge. Clear acrylic version. superb condition. £700 ono. Tel: 01484 427 426

KIMBER SELECT KS3038 speaker cable. 8 feet pair, silver spades, flight case. Top of the range cable, 5.7k new. Now £170. Tel: 07411 388 152


JOLIDA JD102B, 25 watts, £84 valves, integrated amplifier. £350. Wilsinlow Audio Design stand mounted speaker with Fostex full range unit. £330. Can deliver if near. Tel: Stuartdarshan67@gmail.com or 07792241875

FOR SALE: Sony TA-E86b. Mint Condition. Minimal Use. For Sale @ £450. Tel: 07877 571 9136 Email: Lesliegriffiths@fastmail.fm

LOVELY BLUE marble facia John Shearne Phase 2 integrated amp, Valve-like sound, 50wpc, low usage and rare, near perfect condition £350 01749 679578 (Somerset)

FOCAL MEZZO Utopia 3-way floor-standing speakers. Cherry and Black piano finish. Mint, boxed, manuals. Light use, (£8700), accept £3,200. Can demonstrate in Naim system. Tel: 01793 728 103

REGA BRIO 3 amplifier, silver, boxed, £235. Sonos ZP90 plus Zonebridge. £235. Mission MX1 speakers, cherry, boxed, as new, £99. Soundstyle XT122 speaker stands, silver, sand filled, £55. Tel: 01793 728 103


SONY XA9000ES sacd/cd player: i-link digital interface, excellent condition. £600 Trichord pulsar dac+power supply. hdcd. upgraded by trichord. excellent condition. £400 01612266125/07877451585 b.nicol@ntlworld.com

QUAD 909 power amplifier 140 watts p.c. mint condition. Little used. boxed. £650 Buyer collects due to weight. Tel 01332 765149 (Derby) john.young390 @britinternet.net


ISOTEK ELITE 1.5 M mains cable new £100. SME IV tonearm cable (includes SME 90 degree socket) SME / VHDH 501 silver tonearm cable (includes SME 90 degree socket) New Offers Stuart Bedfordshire T: 07870 912 963 E: stuarddarshan67@gmail.com

GARRARD 401 turntable £400, SME 3009 tone arm £190, Quad FM4 tuner £90. Telephone 01189 413708.

WANTED: SERVICE sheets or service manual for Marantz CD94 or Philips CD960. Tel: 01708 457 691

NORDOST FLATLINE Blue Heaven speaker cables. Stereo pairs 1 x 4.5m (cost £1030) and 1 x 2.5m (cost £630). Unused/new. Bargain at £530 the lot. E-mail: dereg1 @aol.com or Tel: 01945 463077.

FOR SALE:Technics SL1210 Mk2 £249. Garrard 401 plus power supply £1200. Both in very good condition. Telephone: 0207 499 8729

NAIM Si integrated amp perfect sound and condition plus remote with box. £430 collect. preferred. (Bristol). 07792241875

SPENDOR 8Be speakers, purchased early 2006 finished in maple veneer and in superb condition, £900. Buyer collects. Original boxes, packing and instruction manual included. Call Jeff on 01305 263069 (West Dorset)."

WANTED NON working Quad 34 and 44 preamps, Quad fm3 and fm4 tuners. Non workers only.Contact Mike 01758 613790.

NAIM DVDS cd/dvd player £525, 112x pre-amp £225, 150x power amp 2008 hardly used £475, 112 pre-amp £175. All mint/boxed Tel:01984 640588 or 07584 358210.

GUIDELINES FOR BUYING AND SELLING SECOND-HAND EQUIPMENT

FOR THE BUYER

1. Not everyone is honest- Buyer Beware!
2. Don't send cash!
3. Accept no verbal guarantees.
4. Have you heard the item or something similar? If not, why do you want it?
5. Don't pretend to have knowledge - it's your fingers that will get burnt!
6. Is it working? If not, why not? Can it be repaired and if so is it worth it?
7. Has it been modified and, if so, have notes been kept?
8. Was it any good in the first place?
9. Don't send cash!
10. If you are in the slightest doubt, arrange an audition (see point 5) If it's too far, wait for another time.
11. Either buy it or don't: vendors are excusably impatient with 'consultation' exercises.
12. Don't send cash!

FOR THE SELLER

1. Not everyone is honest- Seller Beware!
2. Make no verbal guarantees.
3. Even 'nearly new' is still second-hand. If the manufacturer's guarantee is no longer in force, your price should reflect this.
4. There is very little intrinsic value in second-hand hi-fi; it's only worth what someone will pay for it.
5. The best guide to pricing is last month's Classifieds: that a 'classic' was worth £xxx a year or two ago is no guide. Values fall as well as rise.
6. Amateur second-hand dealing is not a big money game: you win some, you lose some.
7. Be prompt with despatch. If in doubt about buyer's bona-fides, either wash out the deal or send C.O.D.
8. There will always be time-wasters; be tolerant within reason!
FREE READER CLASSIFIEDS

HEYBROOK SIXTEETS wanted or tonigen ribbon tweeters. E mail peterscott341
@tiscali.co.uk
tel no 01606 784767

TECHNICS SL7 parallel tracker classic turntable with sounds to shame any a modern deck. Pristine condition, hardly used and full working order. £400. 07793749178
(London) david@veniceinfosite.com

AUDIO RESEARCH Reference 21 mono-amps. 200 Hours use from new, perfect, boxed, manuals, accessories. Stunning sound. Overseas works forces hardly used and full working deck. Pristine condition, sounds to shame many a mod.
656990 or nemalI@aol.com

ACCUPHASE DP800/801 SACD/CD/DAC 2 box. One of the finest CD players ever made. Perfect condition, boxed, very little use due to overseas working. Inspection welcome. 9,995.00. own For more details contact Neil on 01925 656990 or nemall@aol.com

KIMBER SELECT 308 speaker cables 1.00m silver next gen spades, Siltech FTM4SG3 1.00m, Kimber Select KS1136 XLR-XLR 1.00m, KS1036 Phono-Phono 0.75m. All approximately 50% of retail, all perfect boxed with little use. For more details contact Neil on 01925 656990 or nemall@aol.com


EDISON VALVE amplifier pure class A 2x25w lovely unit £700 Audio Innovations L2 pre-amp great condition £250 Marantz CD6000O KE K1 signature £200 B&W 602 speakers £120 01202-419414

24bit 92kHz / 24bit 96kHz PCM WAV file vinyl LP transcriptions. Email for more information. geoff@btinternet.com

BEAUTIFUL PIANO Gloss Maple QUAD 11L speakers, lovely condition inc. 2 x 5m terminated biwire cable and silver Atacama Nexus stands (sorry no spikes) £280 the lot.(buyer collects) 01727 842769 eves.

QUAD CD67, original box and bits, good condition £399 own + carriage. Loudspeaker drive units and crossover components, Call Tom 0117 950 9778 or info @oakfieldonline.com

QUAD ESL-63's serial numbers 1229/1230. Teak wood finish I think, enjoyed by my father for 20+ years. Offers please to nickgoode@blueyonder.co.uk

AUDIOLAB PRE / Pwr 8000p Silver 8000c Black Versatile analogue Ref. power cord 2m 20amp IEC. (£835) nickgoode@blueyonder.co.uk

MUSICAL FIDELITY – electra e101 stereo integrated amp with onboard phone stage and class a headphone amp. denon – dvd 1940 universal disc player – cd/sacd/dvd/audio and ddvideo – multi-channel outputs. marantz – st4000 fm/am analogue tuner: tannoy – mercury fi custom bookshelf loudspeakers, with chord and cable talk interconnects and loudspeaker cables. reasonable offers accepted and buyer collects, enquiries to scottie on 077844-88499 or voyageerms@yahoo.co.uk

TRANSPARENT Audio Music Wave Super mm2 speaker cables. 3 metres each side. Price new: £1674. Sell for £800 o.n.o. Owner changing to headphones. 07899721899. email: yatesether@goolemail.com. London.

SYSTEM AUDIO SA1230 floorstanding loudspeakers finished in Cherrywood. Excellent condition, lightly used only. £450. West London, E-Mail russmiller14@hotmail.com or Tel. 07921 835142.

WANTED MINT or vgc face plate for handles for a Krell KSA 50 Mk 1, any. Does anyone have a spare they want to sell? Call John on 07931 16556 or 01726-222911 evenings, email johnbporter@hotmail.co.uk.

SONY, Twin Cassette Deck. TC-WE 475. Boxed. Used once at Charity Function. £50. + P&P grant.darras@gmail.com Tel: 01661 823606.

ARCAM FMJ A18 Amplifier, and Arcam FMJ CD17. Both Black, almost mint condition, manuals, remote’s. Cost £600 each, 2 years ago. Sell £225 each. 01606 79032 Tuesday-Friday anytime (Cheshire)

MAGNEPLANAR L4 loudspeakers Ex condition (owned since new) – includes new covers + bespoke stands & fixi tuning fits updated. Can demonstrate, call for more details e: Stuartdarshan67 @goolemail.com (Bedfordshire) T:07870 912963

WANTED AUDIO Synthesis Silver Blue SP interconnect and loudspeaker cable. Tel: 01745798932 Rhy. Mobile: 07714530889.

WANTED: METAL cassette tapes: Maxell or TDK. New or little used. Tel: 01395 576644 or Email: jmichaelbrittain@yahoo.com


UNIVERSAL AVO meter, Model 7, with instructions back. Perfect working order. £50 ono. Please ring for details 0115 975 4070 (Nottingham)

REVOX B77 Mk2, 4 track tape recorder, perfect working order, lightly used, unmarked condition, NAV adapters, original box and manual. £350, Tel: 020 8395 9831 or 07722 997448.

One week after the Bristol Sound & Vision Show came another show that was very different. Held by the Hi-Fi Wigwam, a U.K. forum, it puts members hi-fi systems on demonstration in a large hotel.

Noel Keywood drove North ...
Big Tannoy speakers were spotted in Robin and Paul's Simpson room. A large, home-built corner cabinet housed 15in Monitor Golds and 12in Monitor Golds resided in Lancaster Cabinets. The corner cabinets were made from 18mm blockboard and contained hot poured bitumen and ceramic tiles to damp cabinet resonances. It must have taken a crane to lift them. The amplifiers were a pair of home-built Mullard monoblocks and a Moon Equinox CD player was in use.

Walking into the Gun room, I came face to face with the neatly arranged and impressive looking system being demo'd by member Baggawire. Just look at those lovely Yamaha NS1000 loudspeakers in our picture, sitting on Atacama SL400 stands. But that wasn't all, the Acoustic Solid turntable was carrying a Cartridge Man Conductor air-bearing, parallel tracking tonearm, with a Cartridge Man Classic pickup cartridge. The Yamaha crossovers had been upgraded by Audiocomponents Ltd and were driven by a Canary Audio CA-608 valve amplifier.

The large Cottesmore meeting room was being run by Serge Aukland. On show were second-hand and well-used B&W 801F loudspeakers, their crossovers being actively fed by a brace of Behringer A500 power amplifiers. In front of these was a Behringer DEQ2496 equaliser and DCX2496 loudspeaker management system (below). This is studio kit and quite different in purpose to the type of system others were running, but novel and interesting all the same. I got the impression it was all put together on a limited budget but it is a very flexible arrangement. Lying on a table was a 16in LP no less! It was an historic item made by the BBC Transcription Service to capture - in this instance - the Ken Moule Seven on BBC Jazz Club.
Our own Adam Smith (aka Beobloke) was there as always, this year with a complete vintage B&O Beomaster 8000 system driving Beovox MS150 loudspeakers, complete with fabric dome midrange units. Also there again was our own Cambridge Audio CD1 CD player with Error Counter.

Our own Adam Smith (aka Beobloke) was there as always, this year with a complete vintage B&O Beomaster 8000 system driving Beovox MS150 loudspeakers, complete with fabric dome midrange units. Also there again was our own Cambridge Audio CD1 CD player with Error Counter.

Inside Syndicate 19 room on the second floor was - for me - the star of the show - a pair of Leak TL12.1 amplifiers of approximately 1947 vintage (right). These are rare birds and valuable historic items, being amongst the first domestic hi-fi amplifiers ever made - and they sound good even today. Audioflyer knew what he had though and was maintaining their originality by using only original replacement parts. As our pictures show the Leaks were in lovely condition and a treat to see. An EMI Stereoscope 555 amplifier was also in working condition, including its scope tube and a Leak Troughline tuner was working away happily. It was worth suffering the M1 is driving rain for five hours to see this room alone!

I found an Aladin's Cave of items in Syndicate Room 15 run by member John. Especially interesting was a Trans-Fi Audio air bearing parallel tracking arm housing a Decca Reference cartridge, and sitting on a Trans-Fi Salvation turntable (top). On the floor sat a massive Technics RS1500US running quarter-inch open reel tape, and it was in perfect condition. Also on the floor lurked a copper chassis valve power amplifier boasting KT120 valves. An Audio Note DIY DAC was being used and JPlayer software running on a notebook computer.

Coming one week after the Bristol Show, the Wigwam "bake off" was a delightful contrast. With 49 different, carefully tuned and individual systems all being demonstrated in a wide range of rooms, this is a non-commercial show that delights visitors. There was an even a "cheap as chips" room demo'ing ultra cheap buys, mostly second hand, able to deliver a decent sound, showing that enjoying music doesn't have to cost an arm and a leg. The Wigwam show is imaginative and gorgeously unconventional. DIY abounds and old products get an airing alongside the radically new. Neither the rain nor the M1 motorway could keep me from enjoying this great show.
NEXT MONTH

Exciting high technology products of awesome ability are arriving at our door. Just look at what we have coming up in the forthcoming June 2012 issue. Here's some of what we hope to bring you.

LOUDSPEAKERS
Audiovector Ki 3 Super
Spendor S3/SR3 Bookshelf
Linn Akurate
Triangle Color

VINYL
Ortofon MC Expression SME Cartridge
Blue Horizon Pro Phono Sate
Oriton Turntable

DIGITAL
Cambridge Audio Azur 651c CD Player
Yamaha RXA3010 / YSP2200 AV AMP & Blu Ray Player
Aune S1 Media Player
Linn Akurate DSM

AMPLIFICATION
Tellurium Q Power Amp
Linn Akurate Power Amp
Cambridge Audio Azur 651a Amp

SYSTEMS
SANSUI WMH-700L Digital System
Linn Akurate System

We cannot guarantee all the above will appear, due to malfunctions, updates, failures, fire, flood, or cargo ships being boarded by pirates and many other reasons given to us.

PICK UP THE JUNE 2012 ISSUE OF HI-FI WORLD ON SALE APRIL 30TH, OR SUBSCRIBE AND GET IT DELIVERED TO YOUR DOOR: p74
**TERMS AND CONDITIONS:** Only one advert per reader. Maximum length per advert is 30 words. Adverts over 30 words will not be accepted. No trade adverts. This section is strictly for readers selling secondhand hi-fi equipment only. Telephone numbers and E-mail addresses are treated as one word. Model numbers are treated as one word i.e. Quad 303 = two words. Sorry, we cannot accept adverts over the telephone. The publisher reserves the right to judge submissions.

You can email your advert to us at: classifieds@hi-fiworld.co.uk or write or type your advertisement copy in block capitals with one word per box and post it to us at:

Hi-Fi World Free Readers Ads,
Unit G4, Argo House, Kilburn Park Road,
London, NW6 5LF.

**WE WILL ACCEPT PHOTOCOPIES OF THIS FORM**

---

**BADGES**

**FREE READER CLASSIFIED ADVERTS COPY DEADLINES**

**JUNE 2012**
- 2ND APRIL

**JULY 2012**
- 8TH MAY

---

**ADVERTISERS INDEX**

<table>
<thead>
<tr>
<th>Brand</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 Audio</td>
<td>108</td>
</tr>
<tr>
<td>2nd Hand HiFi</td>
<td>98</td>
</tr>
<tr>
<td>Absolute Sounds OBC</td>
<td>86</td>
</tr>
<tr>
<td>Air Audio</td>
<td>100</td>
</tr>
<tr>
<td>Audio Components</td>
<td>94</td>
</tr>
<tr>
<td>Avid HiFi</td>
<td>100</td>
</tr>
<tr>
<td>Basically Sound</td>
<td>86</td>
</tr>
<tr>
<td>Billy Vee</td>
<td>106</td>
</tr>
<tr>
<td>Black Rhodium</td>
<td>28, 42</td>
</tr>
<tr>
<td>Black Rhodium</td>
<td>28, 42</td>
</tr>
<tr>
<td>Classique Sounds</td>
<td>100</td>
</tr>
<tr>
<td>Eclipse</td>
<td>82</td>
</tr>
<tr>
<td>Emis Audio</td>
<td>42</td>
</tr>
<tr>
<td>EnjoyTheMusic.com</td>
<td>106</td>
</tr>
<tr>
<td>Exposure</td>
<td>102</td>
</tr>
<tr>
<td>Furutech</td>
<td>42</td>
</tr>
<tr>
<td>Heatherdale Audio</td>
<td>106</td>
</tr>
<tr>
<td>Henley Designs 62,63, 88</td>
<td>98</td>
</tr>
<tr>
<td>HiFi Sound</td>
<td>102</td>
</tr>
<tr>
<td>Ian Harrison</td>
<td>50</td>
</tr>
<tr>
<td>Icon Audio</td>
<td>104</td>
</tr>
<tr>
<td>Inspire HiFi</td>
<td>40, 80</td>
</tr>
<tr>
<td>Isokinetik</td>
<td>104</td>
</tr>
<tr>
<td>KEF</td>
<td>16</td>
</tr>
<tr>
<td>Mei-Xing Electronics</td>
<td>28</td>
</tr>
<tr>
<td>Midland Audio Exchange</td>
<td>104</td>
</tr>
<tr>
<td>Multiroom Electronics</td>
<td>108</td>
</tr>
<tr>
<td>Music First</td>
<td>102</td>
</tr>
<tr>
<td>Musical Fidelity</td>
<td>84</td>
</tr>
<tr>
<td>QAT</td>
<td>6</td>
</tr>
<tr>
<td>Retro Reproduction</td>
<td>102</td>
</tr>
<tr>
<td>Rock Solid Sounds</td>
<td>106</td>
</tr>
<tr>
<td>Sevenoaks 109,110,111</td>
<td>60</td>
</tr>
<tr>
<td>Signals</td>
<td>60</td>
</tr>
<tr>
<td>SME</td>
<td>60</td>
</tr>
<tr>
<td>Sound Foundations</td>
<td>106</td>
</tr>
<tr>
<td>Sound HiFi</td>
<td>16</td>
</tr>
<tr>
<td>Tannoy</td>
<td>24</td>
</tr>
<tr>
<td>Teac</td>
<td>70</td>
</tr>
<tr>
<td>TelluriumQ 28, 104</td>
<td>11</td>
</tr>
<tr>
<td>The Chord Company</td>
<td>46</td>
</tr>
<tr>
<td>Turntable World</td>
<td>98</td>
</tr>
<tr>
<td>Unique Furniture Outlet</td>
<td>60</td>
</tr>
<tr>
<td>Usher</td>
<td>102</td>
</tr>
</tbody>
</table>

---

**FREE READER CLASSIFIED ADVERTS ORDER FORM**

**STOP PRESS**

**FREE READER CLASSIFIED ADVERTS COPY DEADLINES**

**JUNE 2012**
- 2ND APRIL

**JULY 2012**
- 8TH MAY
Some of the best music around was meant to be consumed as one might gorge on a bucket of popcorn...that is, for the sheer immediate joy of it and without any thought of retaining it for later use. In this case, music broadcast on the radio – BBC radio, to be exact.

Radio sessions initially became a popular 'fad' during the later part of the nineteen sixties and maintained their fascination throughout the following decades, acting as a vehicle to promote bands and their new music. A source of unique performances, bands often utilised the air space to play music they sometimes never recorded or played anywhere else, making such sessions a treasure trove for dedicated fans. In addition, if the BBC caught a band on a good day, the subsequent live session sometimes included definitive recordings of otherwise familiar tracks.

This new box set of BBC Sessions from the legendary heavy metal outfit, Deep Purple, features two full years worth of tracks that initially appeared on top rated radio shows such as Top Gear, Dave Symonds Show, Sounds Like Tony Brandon Show, Dave Cash Show, Stuart Henry Show, Mike Harding Sounds Of The Seventies and the sugar rich Chris Grant's Tasty Pop Sundae.

This new package arrives in a sturdy pizza-style box with sleeve art and track listing on the rear. Inside you will find two CDs, contained in a card sleeve, one for each year: 1968-69 and 1969-70. Also present in the box is a pair of vinyl discs presented in their own sleeves sporting the same artwork as the CDs but with additional photographs and, inside each, inner sleeves featuring further photographs. The track listing is duplicated on both formats with the exception of a brief interview with Rod Evans, hosted by BBC radio’s own Brian Matthew, (present on the 1968-69 CD) and a chat with Jon Lord, also hosted by Matthews (on the 1969-70 CD) that has been removed from the vinyl version due to space restrictions.

Most of these tracks have never appeared on a commercial release before, often turning up as poorly recorded bootleg teasers. The collection is doubly fascinating because this selection features both the Mk.1 and Mk.2 versions of the group. Deep Purple were one of a few select rock groups that changed their line-up more times than a police identity parade. To keep pace with the changes, fans have segregated the changes into different 'marks'. Mk.1 included the members: Jon Lord, Ian Paice, Ritchie Blackmore, Nick Simper and Rod Evans. The second incarnation, Mk.2, included: Jon Lord, Ian Paice, Ritchie Blackmore, Roger Glover and Ian Gillan.

The Mk.1 version provided a notable learning process for the group, a grounding towards the eventual superstar status that the band would enjoy from their Mk.2 line-up and onwards. The live recordings from this first disc are much more passionate and in your face than the equivalent, official, studio recordings providing a rich range in styles and arrangements. Yes, the quality of the recordings from this first disc can sometimes fall beneath the audiophile standard but the archival value is immeasurable, while the quality is much improved over bootlegs offering similar content.

The same can be said of the second disc, although the sound quality is generally superior all round, while tracks such as 'Child In Time' are arguably superior than the commercial offerings with Jon Lord's organ playing hitting the heights.

Soundwise, the CD versions are crisp, sharp but rather forward in the upper midrange. There is some excess compression but not as bad as some chart discs I have heard of late – it is there, however. The CD version, recorded at a higher gain, demands that you knock the volume down by five or six notches to retain listenability.

The vinyl version, on the other hand, removes all compressive problems to present a more rounded presentation with a more organic bass and accessible midrange and treble. The nature of the recording source means that, on a top quality hi-fi system, the vinyl will run out of breath well before the hi-fi does but, still, the vinyl chain will allow the Sessions to run their full course in sonic terms, allowing the passion to hit you full in the solar plexus.

This box set is an honest-to-goodness essential purchase for any Deep Purple fan. Many fans will stick with the cheaper CD-only version but the audiophile will need this luxury CD/vinyl version which provides the best available sound quality. PR
Not all diamonds are forever. This one is.

USHER Dancer Diamond Series. Featuring the world's first Amorphous DLC (diamond-like-carbon) diaphragm tweeter, which makes all current diamond tweeters on the market obsolete. To find out more, visit www.usheraudio.com, or USHER'S UK Distributor Hi-Fidelity to find your local stockist.

Behind the Scene
A world renown authority in audio and acoustics, Dr. Joseph D'Appolito designs crossovers and does the final tuning for Usher's speaker systems. Consulting to a couple of famous audio companies, Dr. D'Appolito finds the tremendous value of Usher's products a pleasant surprise in today's high end audio world.

Visit our website at: www.hi-fidelityuk.co.uk
Or contact us on 08450 525259 for your local stockist
When Herman van de Dungen founded PrimaLuna, his mission was to create affordable valve amplifiers and CD players that not only harnessed the sheer, sensual musicality of valve technology, but also defied the issues of reliability that sometimes accompany it.

PrimaLuna’s Prologue and Dialogue ranges continue to expand, featuring ground-breaking advances such as the unique Adaptive AutoBias™ circuit that allows easy switching between valve types and the jitter-reducing SuperTubeClock™, exclusively incorporated into PrimaLuna’s CD players. These innovations help create a benchmark-setting suite of products that builds on the marque’s past triumphs, combining excellent sonic definition with a beautifully balanced tonality.

Aesthetically stunning to look at, with a hand-polished black or silver faceplate, PrimaLuna consistently fulfils Herman’s original promise of creating the best you can get for the least you can pay.

The living heart of your sound system.